Minnesota Workers' Compensation System Report, 2003

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Executive summary

In parallel with nationwide trends, Minnesota's workers' compensation system experienced major cost reductions in the early 1990s and a period of stability in the middle of the decade. Since the end of the 1990s, costs have moved upward.

This report, part of an annual series, presents data from 1997 through 2003 on several aspects of Minnesota's workers' compensation system — claims, benefits, and costs; medical cost trends; vocational rehabilitation; and disputes and dispute resolution. The report's purpose is to describe statistically the current status and direction of workers' compensation in Minnesota and to offer explanations where possible for recent developments.

These are the report's major findings:

- The claim rate fell continually from 1997 to 2003, with a more rapid decline during the last three years.
- Indemnity and medical benefits per claim are up sharply (adjusting for wage growth). Benefits have increased more gently as a percentage of payroll, because of the falling claim rate.
- The increase in indemnity benefits is due partly to increasing benefit duration and partly to increases in the frequency and amounts of stipulated benefits.
- According to data from a large insurer, the largest contributing factors to the recent increases in medical costs were outpatient hospital facility services, drugs, radiology, and surgery and anesthesia. The cost increases for radiology and surgery and anesthesia were primarily due to a shift toward more expensive services.
- The vocational rehabilitation participation rate rose steadily from 1997 to 2003.
- The dispute rate increased from 1999 to 2003.
- Total workers' compensation system cost rose relative to payroll from 2000 to 2003, after reaching a low-point in 2000.

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Introduction

During the early and middle 1990s, through cost-control measures by employers and insurers and law changes in most states, workers' compensation benefits and costs fell nationwide. In Minnesota, a combination of employer and insurer efforts and law changes in 1992 and 1995 produced major cost reductions in the first half of the 1990s, followed by a period of stability in the second half of the decade. However, in the past few years, costs have begun to increase relative to payroll.

This report, part of an annual series, presents data from 1997 through 2003 on several aspects of Minnesota's workers' compensation system — claims, benefits and costs; medical cost trends; vocational rehabilitation; and disputes and dispute resolution. The report's purpose is to describe statistically the current status and direction of workers' compensation in Minnesota.

Chapter 2 presents overall claim, benefit and cost data. Chapter 3 provides more detailed data to explain some of the trends in Chapter 2. Chapter 4 presents medical cost trends using data from a large insurer. Chapters 5 and 6 provide statistics on vocational rehabilitation and on disputes and dispute resolution.

Appendix A contains a glossary with descriptions of, among other things, the major types of benefits. Appendix B summarizes portions of the 2000 law changes relevant to trends in this report.

Appendix C describes data sources and estimation procedures. Appendices D and E present medical trend data supplementing Chapter 4.

Some important points to keep in mind throughout the report:

Developed statistics — Most statistics in this report are presented by injury year or insurance policy year.[1] An issue with such data is that the originally reported numbers for more recent years are not mature because of longer claims and reporting lags. In this report, all injury year and policy year data is "developed" as needed to a uniform maturity so that the statistics are comparable over time. The technique uses "development factors" (projection factors) based on observed data for older claims.[2]

Adjustment of cost data for wage growth — Several figures in the report present costs over time. As wages and prices grow, a given cost in dollar terms represents a progressively smaller economic burden from one year to the next. If the total cost of indemnity and medical benefits grows at the same rate as wages, there is no net effect on cost as a percentage of payroll. Therefore, all costs (except those costs expressed relative to payroll) are adjusted for average wage growth. The adjusted trends reflect the extent to which cost growth exceeds average wage growth.[3]

[1] Definitions in Appendix A. Some insurance data is by accident year, which is equivalent to injury year.

[2] See Appendix C for more detail.

[3] See Appendix C for computational details.

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Claims, benefits and costs: overview

This chapter presents overall indicators of the status and direction of Minnesota's workers' compensation system.

Major findings

- The number of paid claims dropped 22 percent relative to the number of full-time-equivalent workers from 2000 to 2003. (Figure 2.1)
- The total cost of Minnesota's workers' compensation system rose 30 percent relative to payroll from 2000 to 2003. (Figure 2.2)
- Adjusted for average wage growth, average indemnity benefits per insured claim rose 44 percent from 1997 to 2002 (the latest year available); average medical benefits per claim rose 52 percent. (Figure 2.4)
- Relative to payroll, indemnity benefits rose 2 percent from 1997 to 2003, while medical benefits rose 23 percent. (Figure 2.6) Benefits increased less rapidly relative to payroll than per claim because of the falling claim rate.
- Pure premium rates have been fairly stable since 1998. (Figure 2.8)

Background

The following basic information is necessary for understanding the figures in this chapter:[4]

Workers' compensation benefits and claim types

Workers' compensation provides three basic types of benefits:

Indemnity benefits compensate the injured or ill worker (or dependents) for wage loss, permanent functional impairment or death.

Medical benefits consist of reasonable and necessary medical services and supplies related to the injury or illness.

Vocational rehabilitation benefits consist of a variety of services to help eligible injured workers return to work. These benefits are counted as indemnity benefits in insurance data, but are counted separately in DLI data. They are considered separately in Chapter 5.

Claims with indemnity benefits are called ***indemnity claims****;* these claims typically have medical benefits also. The remainder of claims are called ***medical-only claims***, because they only have medical benefits.

Insurance arrangements

Employers cover themselves for workers' compensation in one of three ways. The most common is to purchase insurance in the "voluntary market," so named because an insurer may choose whether to insure any particular employer. Employers unable to insure in the voluntary market may insure through the Assigned Risk Plan, the insurance program of last resort administered by the Department of Commerce. Employers meeting certain financial requirements may self-insure.

[4] See Appendix A for more detail.

Rate-setting

Minnesota is an open-rating state for workers' compensation, meaning rates are set by insurance companies rather than by a central authority. In determining their rates, insurance companies start with "pure premium rates." The Minnesota Workers' Compensation Insurers Association (MWCIA) — Minnesota's workers' compensation data service organization and rating bureau — calculates these rates every year.

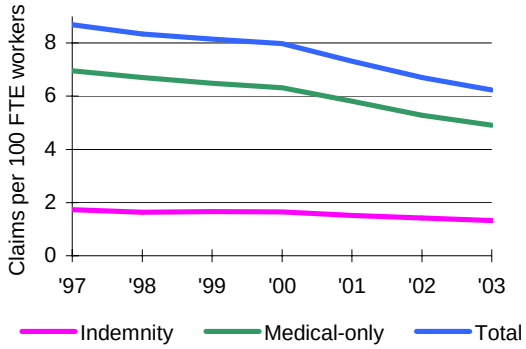
The pure premium rates represent expected losses (indemnity and medical) per $100 of payroll for some 600 payroll classifications. Insurance companies add their own expenses to the pure premium rates and make other modifications in determining their own rates. Of necessity, the pure premium rates are calculated with prior data (the most recent available); therefore, a lag of two to three years exists between benefit trends and pure premium rate changes.

Claim rates

Claim rates declined continually from 1997 to 2003, with more rapid decline in the last three years of that period.

- In 2003, there were:
  - 6.2 paid claims per 100 FTE workers, down 22 percent from 2000;
  - 1.3 paid indemnity claims per 100 FTE workers, down 20 percent from 2000;
  - 4.9 paid medical-only claims per 100 FTE workers, down 22 percent from 2000.
- The overall paid claim rate for 2003 was down 28 percent from 1997.
- Indemnity claims have made up 20 to 21 percent of all paid claims since 1997.

Figure 2.1 Paid claims per 100 full-time-equivalent workers, injury years 1997-2003 [1]



Injury year	Indemnity claims	Medical-only claims	Total claims
1997	1.7	7.0	8.7
2000	1.7	6.3	8.0
2001	1.5	5.8	7.3
2002	1.4	5.3	6.7
2003	1.3	4.9	6.2

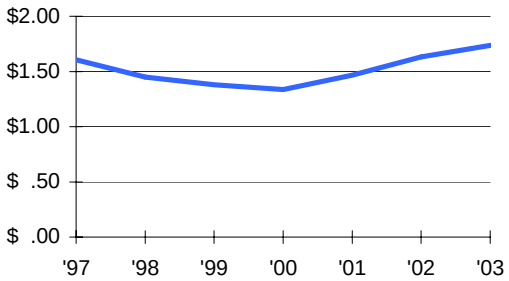
1. Developed statistics from DLI data and other sources (see Appendix C).

System cost

The total cost of Minnesota's workers' compensation system continued increasing relative to payroll from its low-point in 2000.

- From 2000 to 2003, cost rose from $1.34 per $100 of payroll to $1.74, a 30-percent increase.
- The total cost of workers' compensation in 2003 was an estimated $1.46 billion, up from $1.36 billion in 2002 (not adjusted for inflation).
- These figures reflect benefits (indemnity, medical and vocational rehabilitation) plus other costs such as claim adjustment, litigation, and taxes and assessments. The figures are computed primarily from actual premium for insured employers (adjusted for costs under deductible limits) and pure premium for self-insured employers (see Appendix C).

Figure 2.2 System cost per $100 of payroll, 1997-2003 [1]



	Cost per $100 of payroll
1997	$1.61
2000	1.34
2001	1.47
2002 [2]	1.63
2003 [2]	1.74

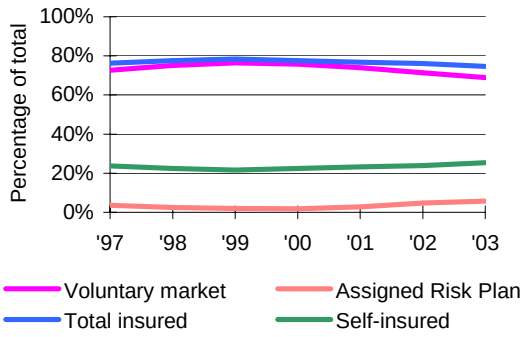
1. Data from several sources (see Appendix C). Includes insured and self-insured employers.
2. Preliminary.

Insurance arrangements

The voluntary market lost market share from 1999 through 2003.[5]

- The voluntary market share of paid indemnity claims was 69 percent in 2003, down from 76 percent in 1999.
- The self-insured share increased from 22 percent in 1999 to 25 percent in 2003.
- The Assigned Risk Plan share increased from 2 percent in 1999 to 6 percent in 2003.
- These shifts are at least partly due to changes in insurance costs shown in Figure 2.2. Rate increases tend to cause shifts from the voluntary market to both the Assigned Risk Plan and self-insurance, while rate decreases cause shifts in the opposite direction.

Figure 2.3 Market shares of different insurance arrangements as measured by paid indemnity claims, injury years 1997-2003 [1]



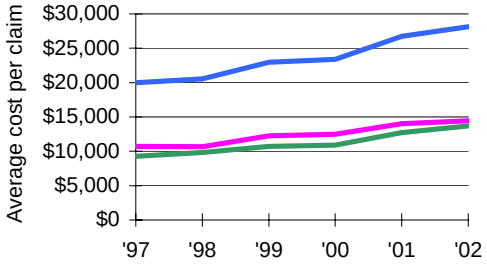
Injury year	Voluntary market	Assigned Risk Plan	Total insured	Self-insured
1997	72.6%	3.7%	76.3%	23.7%
1999	76.4	2.0	78.4	21.6
2000	75.8	1.9	77.6	22.4
2001	73.9	2.8	76.7	23.3
2002	71.3	4.7	76.1	23.9
2003	68.9	5.7	74.6	25.4

1. Data from DLI.

[5] When market share is measured by pure premium (not shown here), the trends are nearly identical.

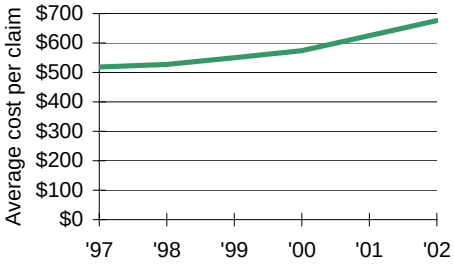
Figure 2.4 Average indemnity and medical benefits per insured claim, adjusted for wage growth, policy years 1997-2002 [1]

A: Indemnity claims



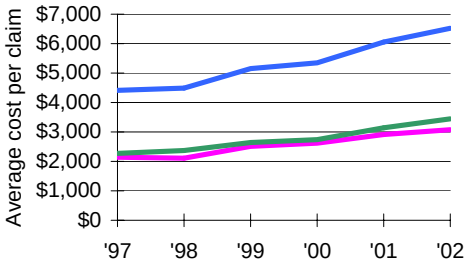
Policy year	Indemnity benefits	Medical benefits	Total benefits
1997	$10,700	$ 9,300	$20,000
2000	12,500	10,900	23,400
2001	14,000	12,700	26,800
2002 (p)	14,500	13,700	28,200

B: Medical-only claims



Policy year		Medical benefits	Total benefits
1997		$519	$519
2000		574	574
2001		625	625
2002 (p)		676	676

C: All claims



Policy year	Indemnity benefits	Medical benefits	Total benefits
1997	$2,140	$2,270	$4,410
2000	2,610	2,740	5,350
2001	2,920	3,140	6,060
2002 (p)	3,080	3,450	6,530

1. Developed statistics from MWCIA data (see Appendix C). Includes the voluntary market and Assigned Risk Plan; excludes self-insured employers. Benefits are adjusted for average wage growth between the respective year and 2003. 2002 is the most recent year available.

p = preliminary

Benefits per claim

Adjusted for wage growth, average benefits per insured claim rose rapidly from 1997 through 2002.

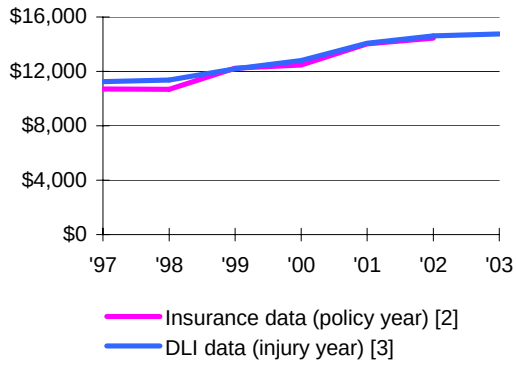
- For all claims combined, in 2002 relative to 1997:
  - average indemnity benefits were up 44 percent;
  - average medical benefits were up 52 percent;
  - average total benefits were up 48 percent.

Indemnity benefits per indemnity claim: insurance and DLI data

According to DLI data, the growth of average indemnity benefits per indemnity claim nearly stopped between 2002 and 2003. The DLI data closely corroborates the insurance data for earlier years (the insurance data is not yet available for 2003).

- The 2003 DLI figure is up 1 percent from 2002, compared with an average growth of more than 5 percent a year for 1997 to 2002.

Figure 2.5 Average indemnity benefits per indemnity claim, adjusted for wage growth, 1997-2003: insurance and DLI data [1]



Policy or injury year	Insurance data [2]	DLI data [3]
1997	$10,700	$11,200
2000	12,500	12,800
2001	14,000	14,100
2002	14,500	14,600
2003	[4]	14,800

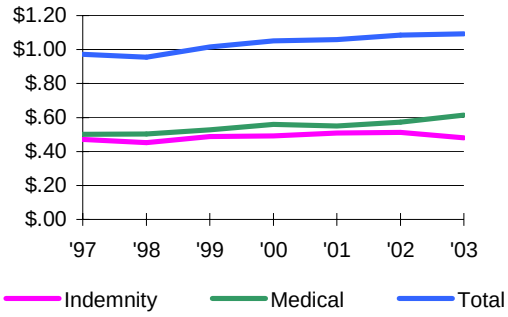
1. Benefits are adjusted for average wage growth between the respective year and 2003.
2. From Figure 2.4. Excludes self-insured employers, supplementary benefits and second-injury claims. Includes the Assigned Risk Plan and vocational rehabilitation benefits.
3. Developed statistics (see Appendix C). Includes self-insured employers, the Assigned Risk Plan, supplementary benefits and second-injury claims. Excludes vocational rehabilitation benefits.
4. Not yet available.

Benefits relative to payroll

Indemnity and medical benefits rose relative to payroll from 1997 to 2003.

- From 1997 to 2003, relative to payroll:
  - indemnity benefits rose 2 percent[6];
  - medical benefits rose 23 percent;
  - total benefits rose 13 percent.
- These changes are the net result of a rapidly decreasing claim rate (Figure 2.1) and a rapidly increasing cost per claim (Figures 2.4, 2.5).

Figure 2.6 Benefits per $100 of payroll in the voluntary market, accident years 1997-2003 [1]



Accident year	Indemnity benefits	Medical benefits	Total benefits
1997	$ .47	$.50	$ .97
2000	.49	.56	1.05
2001	.51	.55	1.06
2002	.51	.57	1.08
2003	.48	.61	1.09

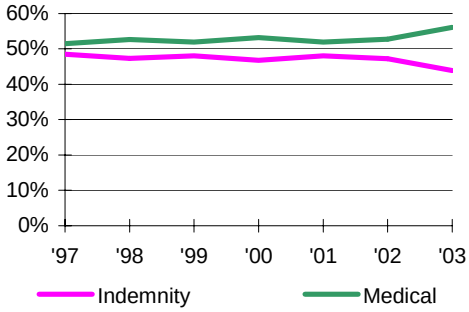
1. Developed statistics from MWCIA data (see Appendix C). Excludes self-insured employers, the Assigned Risk Plan, and supplementary and second-injury benefits.

Indemnity and medical shares

The medical share of total benefits held steady from 1997 through 2002, but increased in 2003.

- Reflecting the data in Figure 2.6, medical benefits were 56 percent of total benefits in 2003, up from 53 percent in 2002 and 52 percent in 1997.
- Indemnity benefits now account for 44 percent of total benefits.

Figure 2.7 Indemnity and medical benefit percentages in the voluntary market, accident years 1997-2003 [1]



Accident year	Indemnity benefits	Medical benefits
1997	48.5%	51.5%
2000	46.8	53.2
2001	48.1	51.9
2002	47.3	52.7
2003	43.9	56.1

1. Developed statistics from MWCIA data (see Appendix C). Excludes self-insured employers, the Assigned Risk Plan, and supplementary and second-injury benefits.

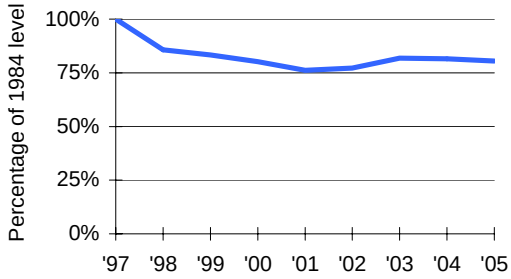
[6] The indemnity benefit trend in Figure 2.6, from insurance data, is closely corroborated by DLI data.

Pure premium rates

Pure premium rates showed little change from 2003 to 2005.

- Pure premium rates fell 1.2 percent, on average, in 2005, after a 0.3-percent drop in 2004, but are up six percent since 2001.[7]
- Pure premium rates are ultimately driven by the trend in benefits relative to payroll (Figure 2.6). However, this occurs with a lag of two to three years, because the pure premium rates for any period are derived from prior premium and loss experience.[8]
- Insurers in the voluntary market consider the pure premium rates, along with other factors, in determining their own rates, which in turn affect total system cost (Figure 2.2).

Figure 2.8 Average pure premium rate as percentage of 1997 level, 1997-2005 [1]



Effective year	Percentage of 1997
1997	100.0%
2001	76.1
2002	77.2
2003	81.7
2004	81.5
2005	80.5

1. Data from the MWCIA. Pure premium rates represent expected indemnity and medical losses per $100 of covered payroll in the voluntary market.

[7] A "percent increase" means the proportionate increase in the initial percentage, not the number of percentage points of increase. For example, an increase from 10 percent to 15 percent is a 50-percent increase.

[8] Changes in pure premium rates directly following law changes also include estimated effects of those law changes.

3

Claims, benefits and costs: detail

This chapter presents additional data on claims, benefits and costs. Most of the data provides further detail on the indemnity claim and benefit information in Chapter 2. Some of the data relates to costs of special benefit programs and state agency administrative functions.

Major findings

- The average duration of total disability benefits rose 35 percent from 1997 to 2003. For temporary partial disability (TPD) benefits, average duration rose 5 percent between 1997 through 1999 and 2001 through 2003.[9] (Figure 3.3)
- Average indemnity benefits per indemnity claim (adjusted for wage growth) rose 31 percent between 1997 and 2003.[10] (Figure 3.6) This is primarily attributable to:
  - the increase in total disability duration; and
  - increases in the frequency and average amount of stipulated benefits. (Figures 3.2, 3.5)
- State agency administrative costs in 2003 amounted to about .039 cents per $100 of covered payroll. This figure has varied only slightly since 1997. (Figure 3.8)

Background

The following basic information is necessary for understanding the figures in this chapter. See Appendix A for more detail.

Benefit types

Temporary total disability (TTD) — A weekly wage-replacement benefit paid to an employee who is temporarily unable to work because of a work-related injury or illness, equal to two-thirds of pre-injury earnings subject to a weekly minimum and maximum and a duration limit. TTD ends when the employee returns to work (among other reasons).

Temporary partial disability (TPD) — A weekly wage-replacement benefit paid to an employee who has returned to work at less than his or her pre-injury earnings, generally equal to two-thirds of the difference between current earnings and pre-injury earnings subject to weekly maximum and total duration provisions.

Permanent partial disability (PPD) — PPD compensates for permanent functional impairment resulting from a work-related injury or illness. The benefit is based on the employee's impairment rating and is unrelated to wages.

Permanent total disability (PTD) — A weekly wage-replacement benefit paid to an employee who sustains one of the severe work-related injuries specified in law, or who, because of a work-related injury or illness in combination with other factors, is permanently unable to secure gainful employment (subject to a permanent impairment rating threshold).

Stipulated benefits — Indemnity and/or medical benefits specified in a claim settlement — "stipulation for agreement" — among the affected parties. A stipulation usually occurs in a dispute; stipulated benefits are usually paid in a lump sum.

[9] The increase of TPD duration is figured using three-year averages because of annual fluctuations.

[10] These figures are somewhat different from comparable figures in Chapter 2 because they are from a different data source (DLI vs. insurance industry) and they include self-insured employers.

Total disability — In most figures in this chapter — those presenting DLI data — the term "total disability" refers to the combination of TTD and PTD benefits, because the DLI data before 2004 did not distinguish between these two benefit types.

Counting claims and benefits: insurance data and department data

The first figure in this chapter uses insurance data (from the MWCIA); all other figures use DLI data.

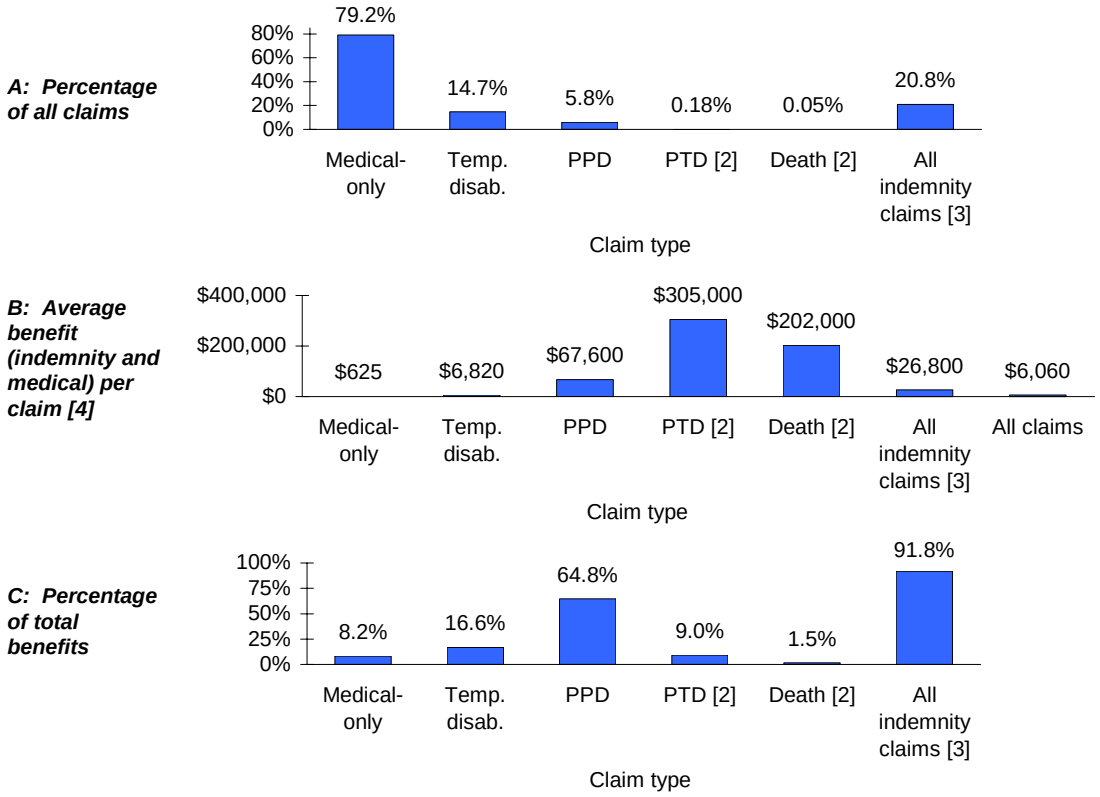
In the insurance data, claims and benefits are categorized by "claim type," defined according to the most severe type of benefit on the claim. In increasing severity, the benefit types are medical, temporary disability (TTD or TPD), PPD, PTD, and death. For example, a claim with medical, TTD, and PPD payments is a PPD claim. PPD claims also include claims with temporary disability benefits lasting more than one year and claims with stipulated settlements. All benefits on a claim are counted in the one claim-type category the claim falls into.

In the DLI data, by contrast, each claim may be counted in more than one category, depending on the types of benefits paid. The same claim, for example, may be counted among claims with total disability benefits and among claims with PPD benefits.

Costs supported by Special Compensation Fund assessment

DLI, through its Special Compensation Fund (SCF), levies an annual assessment on insurers (including self-insurers) to finance costs in DLI and other state agencies to administer the workers' compensation system and certain benefits for which DLI is responsible. Primary among these benefits are supplementary benefits and second-injury benefits. Although these programs have been eliminated, benefits must still be paid on old claims (see Appendices B and C). Insurers add the assessment amount to premium charged to employers, and this is included in total workers' compensation system cost (Figure 2.2).

Figure 3.1 Benefits by claim type for insured claims, policy year 2001 [1]



1. Developed statistics from MWCIA data (see Appendix C). 2001 is the most recent year available.
2. Because of annual fluctuations, data for PTD and death claims are averaged over 1999-2001 (see Appendix C).
3. Indemnity claims consist of all claim types other than medical-only.
4. Benefit amounts in Panel B are adjusted for overall wage growth between 2001 and 2003.

Benefits by claim type

Each claim type contributes to total benefits paid depending on its relative frequency and average benefit. PPD claims account for the majority of total benefits.

(As indicated above, in the insurance data, the benefits for each claim type include all types of benefits paid on that type of claim. PPD claims, for example, may include medical, TTD, and TPD benefits in addition to PPD benefits.)

- PPD claims accounted for 65 percent of total benefits in 2001 (Panel C in figure) through a combination of low frequency (Panel A) and higher-than-average benefits per claim (Panel B).
- Other claim types contributed smaller amounts to total benefits because of very low frequency (PTD and death claims) or very low average benefits (medical-only claims).
- Indemnity claims were 21 percent of all paid claims, but accounted for 92 percent of total benefits because they have far higher benefits on average than medical-only claims ($26,800 vs. $625).
- The percentages and relative benefit amounts in the figure have been fairly stable during the past several years.

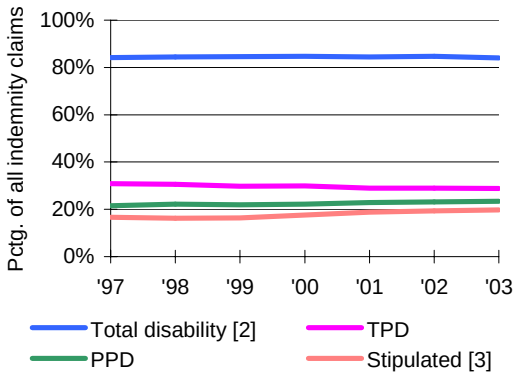
Claims by benefit type

Since 1997, as a proportion of all paid indemnity claims, claims with PPD benefits and claims with stipulated benefits have increased, claims with TPD benefits have decreased and claims with total disability benefits have been stable.

- From 1997 to 2003:
  - the percentage of claims with stipulated benefits rose about 3 percentage points;
  - the percentage of claims with PPD benefits rose about 2 percentage points;
  - the percentage of claims with TPD benefits fell 2 percentage points.

- The increase in the percentage of claims with stipulated benefits is related to a similar increase in the dispute rate. (Figure 7.1)

Figure 3.2 Percentages of paid indemnity claims with selected types of benefits, injury years 1997-2003 [1]



Injury year	Total disab.[2]	TPD	PPD	Stipu-lated [3]
1997	84.1%	30.8%	21.6%	16.7%
2000	84.7	29.9	22.2	17.7
2001	84.4	28.9	22.8	18.8
2002	84.8	29.0	23.1	19.4
2003	84.0	28.8	23.3	19.7

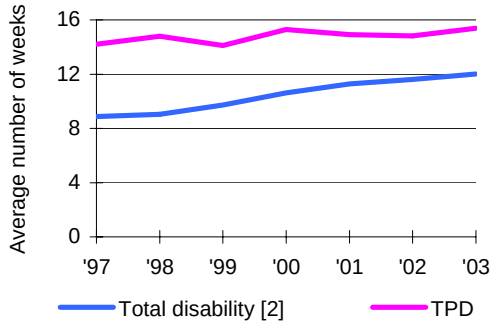
1. Developed statistics from DLI data (see Appendix C). An indemnity claim may have more than one type of benefit paid. Therefore, the sum of the figures for the different benefit types is greater than 100 percent.
2. Total disability includes TTD and PTD. Before 2004, TTD and PTD were not distinguished in the DLI database.
3. Includes indemnity and medical components. Because of certain data reporting issues, the percentage of paid indemnity claims with stipulated benefits for 2003 was projected from the 2002 number using the trend in the dispute rate. See Appendix C.

Benefit duration

The average duration of total disability benefits has increased substantially since 1997. A slight increase seems to have occurred for TPD benefits.

- Total disability duration rose 35 percent from 1997 to 2003.
- The picture is less clear with TPD duration because of annual fluctuations. However, the annual average for 2001 to 2003 (15.0 weeks) is up 5 percent from 1997 to 1999 (14.4 weeks).
- These trends in duration affect indemnity cost per claim. (Figures 2.4, 2.5, 3.5, 3.6) As a result, they also affect pure premium rates and system cost. (Figures 2.2, 2.8)

Figure 3.3 Average duration of wage-replacement benefits in weeks, injury years 1997-2003 [1]



Injury year	Total disab.[2]	TPD
1997	8.9	14.2
2000	10.6	15.3
2001	11.3	14.9
2002	11.6	14.8
2003	12.0	15.4

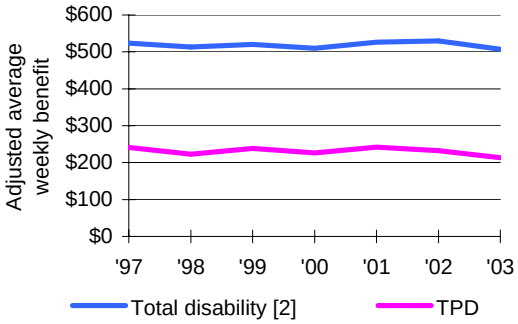
1. Developed statistics from DLI data (see Appendix C).
2. Total disability includes TTD and PTD. Before 2004, TTD and PTD were not distinguished in the DLI database.

Weekly benefits

Average weekly total disability and TPD benefits have been fairly stable since 1997, after adjusting for average wage growth. This means these weekly benefits have increased by roughly the same proportion as overall wage levels.

- Although average weekly TPD benefits appear to have fallen significantly between 2002 and 2003, this should be viewed with caution because of historical fluctuations in this data series.

Figure 3.4 Average weekly wage-replacement benefits, adjusted for wage growth, injury years 1997-2003 [1]



Injury year	Total disab. [2]	TPD
1997	$523	$241
2000	510	226
2001	527	241
2002	530	232
2003	508	214

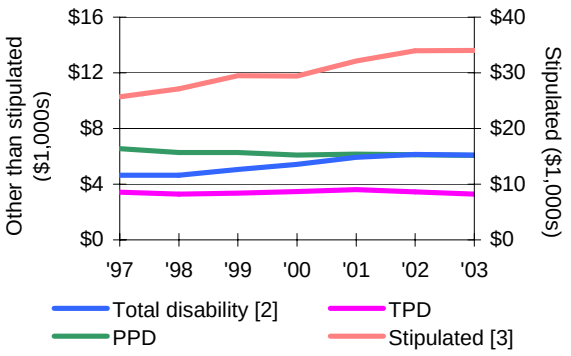
1. Developed statistics from DLI data (see Appendix C). Benefit amounts are adjusted for average wage growth between the respective year and 2003.
2. Total disability includes TTD and PTD. Before 2004, TTD and PTD were not distinguished in the DLI database.

Average indemnity benefits by type

Adjusting for average wage growth, average total disability and stipulated benefit amounts (per claim with that benefit type) increased between 1997 and 2003. Average adjusted PPD benefits fell slightly during the same period.

- In 2003 relative to 1997, after adjusting for average wage growth:
  - average stipulated benefits were up 33 percent;
  - average total disability benefits were up 31 percent;
  - average PPD benefits were down 7 percent;
  - average TPD benefits were stable.
- The trends in average total disability and TPD benefits are driven by the trends in average benefit duration and average weekly benefits. (Figures 3.3 and 3.4) The recent increase in average total disability benefits was caused by an increase in benefit duration.
- Adjusted average PPD benefits fell primarily because PPD benefits are paid under a benefit schedule that remains fixed, apart from statutory increases. Under the fixed schedule, PPD benefits fall relative to rising wages, which is reflected in the adjusted average benefits.
- The recent increase in average stipulated benefits is likely attributable to increasing values of claims involved in settlements, related to the increases in total disability benefits and, to a lesser degree, the 2000 increase in the PPD benefit schedule.

Figure 3.5 Average indemnity benefit by type *per claim with that benefit type,* adjusted for wage growth, injury years 1997-2003 [1]



Injury year	Total disab.[2]	TPD	PPD	Stipu-lated [3]
1997	$4,640	$3,430	$6,560	$25,680
2000	5,420	3,460	6,100	29,410
2001	5,940	3,600	6,160	32,150
2002	6,150	3,440	6,120	33,950
2003	6,090	3,290	6,080	34,050

1. Developed statistics from DLI data (see Appendix C). Benefit amounts are adjusted for average wage growth between the respective year and 2003.
2. Total disability includes TTD and PTD. Before 2004, TTD and PTD were not distinguished in the DLI database.
3. Includes indemnity and medical components.

Indemnity benefits per indemnity claim

Average indemnity benefits per indemnity claim rose between 1997 and 2003, adjusting for average wage growth. The cause was an increase in total disability and stipulated benefits per claim. The increase in total disability benefits per claim is mostly attributable to duration increases. The 2000 law change contributed a relatively small amount.

Note: Figure 3.6 differs from Figure 3.5 in that it shows the average benefit of each type *per indemnity claim*, rather than *per claim with that type of benefit.* Figure 3.6 reflects both the percentage of indemnity claims with each benefit type (Figure 3.2) and average benefit amounts per claim with the respective benefit type (Figure 3.5).

- Indemnity benefits per indemnity claim in 2003 were up 31 percent from 1997. These numbers (last column of Figure 3.6) are the DLI numbers in Figure 2.5.

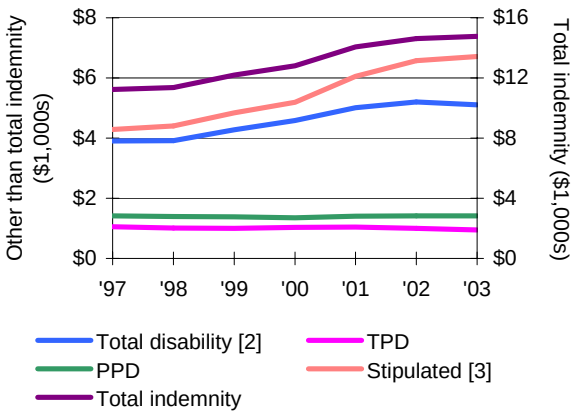
- The increase in indemnity benefits per claim from 1997 to 2003 ($3,520) came from increases in total disability benefits ($1,210) and stipulated benefits ($2,420).

  - The increase in total disability benefits per indemnity claim resulted from an increase in duration (Figure 3.3). (The percentage of indemnity claims with total disability benefits was stable (Figure 3.2).)
  - The increase in stipulated benefits per indemnity claim resulted primarily from an increase in average stipulated benefit amounts (Figure 3.5) and to a lesser degree from an increase in the proportion of claims with these benefits (Figure 3.2).

- In 2003, total disability and stipulated benefits per indemnity claim were several times as large as TPD and PPD benefits per indemnity claim.

- DLI estimated that the indemnity benefit increases enacted by the 2000 Legislature would raise total indemnity benefits by 4.6 percent. This is about a seventh of the 31-percent increase in indemnity benefits per claim from 1997 to 2003. Most of the legislated benefit increase was in the form of an increase in PPD benefits and an increase in minimum and maximum weekly benefits (see Appendix B).

Figure 3.6 Average indemnity benefit by type *per paid indemnity claim*, adjusted for wage growth, injury years 1997-2003 [1]



Injury year	Total disab. [2]	TPD	PPD	Stipu-lated [3]	Total indem. [4]
1997	$3,910	$1,050	$1,410	$4,290	$11,240
2000	4,590	1,030	1,360	5,190	12,800
2001	5,010	1,040	1,400	6,060	14,070
2002	5,210	1,000	1,420	6,580	14,620
2003	5,110	940	1,420	6,710	14,760

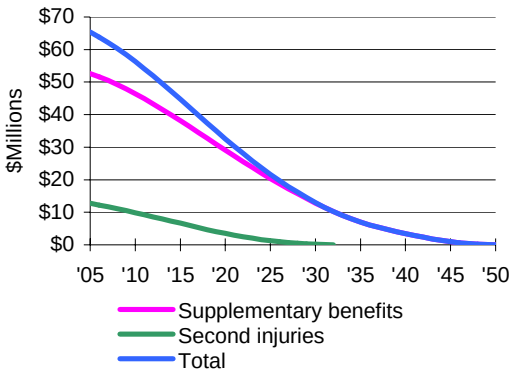
1. Developed statistics from DLI data (see Appendix C). Benefit amounts are adjusted for average wage growth between the respective year and 2003.
2. Total disability includes TTD and PTD. Before 2004, TTD and PTD were not distinguished in the DLI database.
3. Includes indemnity and medical components.
4. Because some benefit types are not shown, total indemnity benefits are greater than the sum of the benefit types shown.

Supplementary benefit and second-injury costs

DLI produces an annual projection of supplementary benefit and second-injury reimbursement costs as they would exist without future settlement activity. The total annual cost is projected to fall in half by 2020.

- The total projected cost for 2005, $65 million, is about 4.5 percent of total workers' compensation system cost.
- The 2005 cost consists of $53 million for supplementary benefits and $13 million for second injuries.
- Without settlements, supplementary benefit claims are projected to continue until 2049, and second injury claims until 2030.
- Claim settlements will reduce future projections of these liabilities. Settlements amounted to about $12 million in fiscal year 2004.

Figure 3.7 Projected cost of supplementary benefit and second-injury reimbursement claims, fiscal claim-receipt years 2005-2050 [1]



Fiscal year of claim receipt	Projected amount claimed ($millions)		
	Supplementary benefits	Second injuries	Total
2005	$52.6	$12.8	$65.4
2010	46.4	9.8	56.3
2020	29.1	3.5	32.6
2030	12.8	.2	13.0
2050	.0	.0	.0

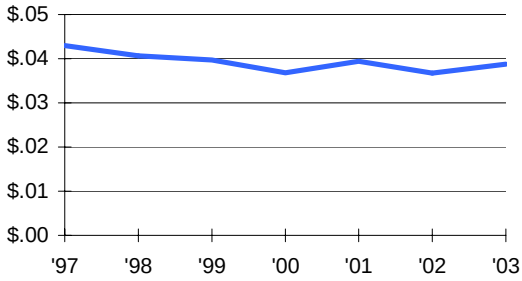
1. Projected from DLI data, assuming no future settlement activity. See Appendix C.

State agency administrative cost

State agency administrative cost has changed little as a proportion of workers' compensation covered payroll during the past several years.

- In fiscal year 2003, state agency administrative cost (see note in figure) came to .039 cents per $100 of payroll.
- Administrative cost for 2003 was about $33 million, or about 2.2 percent of total workers' compensation system cost.

Figure 3.8 Net state agency administrative costs per $100 of payroll, fiscal years 1997-2003 [1]



Fiscal year	Admin. cost per $100 of payroll
1997	$.043
2000	.037
2001	.039
2002	.037
2003	.039

1. Includes costs of workers' compensation functions in DLI, the Office of Administrative Hearings, the Workers' Compensation Court of Appeals, and the Department of Commerce, as well as the cost of Minnesota's OSHA program. Costs are net of fees for service. Data from DLI, MWCIA and WCRA.

4

Medical cost detail

An important finding from Chapter 2 is that between policy years 1997 and 2002, average medical benefits per claim grew 52 percent after adjusting for wage growth. This chapter, appearing for its second year, presents additional statistics on medical costs. DLI Research and Statistics computed these figures from detailed workers' compensation medical cost data for Minnesota from a large insurer.[11] Although the claims in this data (the "research data") are similar to the state's overall claim population on some important dimensions (see below), it is uncertain how closely the results represent Minnesota's overall workers' compensation experience. However, on a qualitative level, the results do point out some important developments — highlighting, for example, certain types of services with relatively large cost increases.

Major findings

The findings are generally similar to those from last year regarding the relative contributions of different factors to the overall increase in medical cost. The main exception is that drugs, the fastest growing cost component, have become the second leading contributor to the overall increase with another year in the analysis period.

The following findings emerge from the research data for injury years 1997 to 2003:

- Adjusted for wage growth, per-claim expenditures increased 102 percent for drugs, 75 percent for outpatient hospital facility services and 43 percent for radiology. The increase for drugs was 69 percent for hospital providers and 142 percent for nonhospital providers. (Figure 4.2)

- Of the $404 increase in total medical cost per claim (adjusted for wage growth), outpatient hospital facility services accounted for $130 (28 percent), drugs $77 (17 percent), radiology $71 (15 percent), and surgery and anesthesia $63 (14 percent). (Figure 4.2)

- For all service groups (except "other services"), the cost increase came primarily from an increasing cost per claim with the service, as opposed to an increasing proportion of claims receiving the service. (Figure 4.3)

- Shifts in service mix were a predominant factor in the cost increase for some services. (Figure 4.4)

  - For radiology, 25 points of the 32-percent increase in the cost per claim with this service resulted from a more expensive service mix.
  - For surgery and anesthesia, the service mix became 18 percent more expensive (which was partly offset by a decrease in quantity of service per claim).

Background

Current cost-control mechanisms

The current mechanisms for controlling medical costs in Minnesota's workers' compensation system came about largely in the 1992 law changes and in rules following those changes. The three most important cost-control mechanisms are the medical fee schedule, treatment parameters and the allowance for using certified managed care organizations.[12]

[11] Several large insurers, third-party administrators and managed care organizations were approached for data for this analysis. Several of them supplied data, but in only one case was the data sufficient for this analysis.

[12] See Appendix B for additional detail.

Fee schedule — The fee schedule sets reimbursement limits for a range of medical services in nonhospital and outpatient-large-hospital settings.[13] The schedule covers evaluation and management, surgery, radiology, pathology and laboratory services, physical medicine and rehabilitation, chiropractic manipulations and other medicine.[14] It is a "relative value" schedule. It uses "relative value units" (RVUs) from Medicare adapted for Minnesota under provisions of the 1992 law. The reimbursement limit for each service is the product of the RVU for that service and a "conversion factor" (CF) indicating the amount of allowable reimbursement per RVU. By law, the CF is adjusted each year by no more than the percent increase in the statewide average weekly wage (SAWW). From 1993 through 2001, the CF was adjusted by the percent increase in the SAWW; in 2002 and 2003, it was adjusted by the percent change in the producer price index for physicians.

Generally, services not covered by the fee schedule are reimbursed at 85 percent of the provider's "usual and customary charge" (U&C) for the service. All large-hospital inpatient services and those large-hospital outpatient services not in the schedule are also reimbursed at 85 percent of U&C. All small-hospital services are reimbursed at 100 percent of U&C. A separate formula applies to the reimbursement of drug charges.[15]

Treatment parameters — The treatment parameters set forth guidelines for the treatment of low back pain, neck pain, thoracic back pain and upper extremity disorders. They cover diagnosis (including diagnostic imaging procedures), conservative (nonsurgical) treatment, surgical treatment, inpatient hospitalization and chronic management.[16] The rules allow for treatments outside of the parameters if specified circumstances warrant. Insurers may deny payment for medical services outside of the parameters.[17]

Certified managed care organizations (CMCOs) — The 1992 law also allowed employers and insurers to require workers (with certain exceptions) to obtain medical care for work injuries from providers in a CMCO network. CMCOs are certified by DLI on the basis of statutory criteria. Currently there are four CMCOs in Minnesota.

Research data

The research data, from a large insurer, includes details on claimant characteristics, injury diagnosis, medical treatment and cost.

A comparison of the research data with DLI claims data (representing the overall population of claims) shows a general similarity between the two with regard to broad industry group, claimant gender and age, and type of injury. However, compared to the overall population of claims, the research data has somewhat lower proportions of women and of claims in the services and public administration sectors. Some of these differences disappear when self-insured claims (in the overall claim population) are removed from the comparison.[18]

This chapter analyzes the 1997 to 2003 period (see below). A comparison of the research data with data for all insurers (available for 1997 to 2001) shows that average medical cost per claim rose significantly less in the research data than for all insurers. Thus, the estimated magnitudes of different components of the overall medical cost increase in the research data are likely to understate, on the whole, the corresponding magnitudes for all insurers combined. [19]

Analytical approach

To analyze the major contributing factors to medical cost, this analysis delineates the following service groups:

[13] Large hospitals are those with more than 100 licensed beds.

[14] "Other medicine" includes services not in the above categories but with Current Procedural Terminology (CPT) codes (trademark of the American Medical Association). These include, among others, immunization, psychiatry, ophthalmology, cardiovascular and pulmonary tests and procedures, and neurology and neuromuscular tests and procedures.

[15] The maximum reimbursement for drugs (except for large-hospital inpatient settings and small hospitals) is the average wholesale price plus a $5.14 dispensing fee (not to exceed retail price for nonprescription drugs).

[16] The parameters concerning chronic management and some imaging procedures apply to all injuries.

[17] Medical providers may appeal a denial of payment.

[18] Details available upon request from DLI Research and Statistics.

[19] See Appendix C (Figure A-1 and surrounding text) for details.

- evaluation and management (e.g., office visits, consultations, visits with hospital patient);
- surgery and anesthesia;
- radiology;
- pathology and laboratory services;
- chiropractic manipulations;
- physical medicine;[20]
- drugs (prescription and nonsubscription drugs supplied to the worker for home use, plus drugs used in patient-care settings);
- equipment and supplies;
- inpatient hospital facility services (not included in the above categories);
- outpatient hospital facility services (not included in the above categories); and
- other services.[21]

For some service groups — surgery and anesthesia, radiology, drugs, and equipment and supplies — the analysis distinguishes between hospital and nonhospital providers. For physical medicine, the analysis delineates between physical therapist, hospital and chiropractic providers.

The analysis presents data by year of injury for injury years 1997 to 2003 (the last year in the research data).[22] It uses 1997 as the base year, because 1997 is the earliest year in a period of relatively low medical costs in both the overall insurance data and the research data.[23] Appendices D and E present trend data for the same period.

As elsewhere in this report, the statistics are presented at a uniform maturity to be comparable over time. In this chapter, the statistics are presented at an average maturity of five years after the date of injury.

Because the composition of claims changes over time with respect to gender, age and injury type, all statistics are adjusted for changes in these factors. In addition, as throughout the report, trends in cost per claim are adjusted for average wage growth.[24] Because of these adjustments, the statistics in this chapter show how medical cost and service utilization would have changed during the period examined if gender, age and injury type had remained constant, and they show the degree to which costs have increased faster than general wage growth. Thus, the statistics do not represent trends in actual cost and utilization. Instead, they represent trends due to factors other than changing gender, age and injury type and, where costs are concerned, trends in excess of general inflation.

Terminology

The cost numbers in this chapter do not represent full medical cost for the claims in question, because the numbers are based on payments only, as opposed to payments plus reserves, and because the numbers are developed only to a moderate maturity (six years). However, this chapter uses the term "medical cost" for consistency with the remainder of the report.

At several points in the analysis, a distinction is made between the average cost of a type of service for claims with that service and the average cost of the service for all claims. The latter is important for understanding the contribution of the service group to total medical cost. It is the product of the percentage of claims with the service and the average cost of the service for claims with the service. For convenience, the discussion refers to the average cost of a service for all claims as the cost of the service "per total claim."

[20] "Physical medicine" is used as shorthand for physical medicine and rehabilitation.

[21] Includes "other medicine" (see note 14) and several miscellaneous services such as transportation and dentistry. "Other medicine" and "other services" were treated as separate categories in last year's report, but are now combined.

[22] See definition of injury year data in Appendix A.

[23] See Figure A-1 in Appendix C.

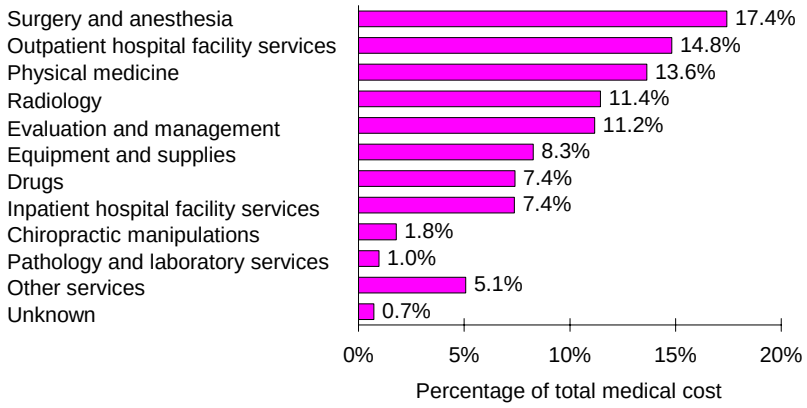
[24] See "Adjustment of cost data for wage growth" in Chapter 1 for rationale. See Appendix C for computational details.

Cost distribution by service group

The largest component of total medical cost for injury year 2003 was surgery and anesthesia.

- Surgery and anesthesia accounted for 17 percent of total medical cost for 2003, followed by outpatient hospital facility services (15 percent) and physical medicine (14 percent).
- The total cost of each service group (and thus its contribution to total medical cost) is the product of the percentage of claims with that type of service and the average cost of that service when it occurs (columns 1 and 2 in the figure).
- The most prevalent types of service (according to the percentage of claims with the service) were evaluation and management (82 percent of claims), drugs (44 percent) and radiology (43 percent).
- The types of service with the greatest cost per claim (for claims with the service) were inpatient hospital facility services ($7,440 per claim), physical medicine ($1,090), and surgery and anesthesia ($1,070).
- For some service groups, there are large differences by provider type in cost per claim with service. These differences may occur because of differences in quantity of service, service mix or cost per unit of service.

Figure 4.1 Medical cost per claim by service group, injury year 2003 [1]



Service group [2]	Pctg. of claims with service	Cost per claim with service	Cost per total claim	Pctg. of total cost
Surgery and anesthesia	33.2%	$1,073	$356	17.4%
Nonhospital providers	*31.8*	*919*	*292*	*14.3*
Hospital providers	*7.0*	*918*	*64*	*3.1*
Outpatient hospital facility services	33.1	916	303	14.8
Physical medicine	25.5	1,091	279	13.6
Physical therapist providers	*14.0*	*1,191*	*166*	*8.1*
Hospital providers	*7.2*	*1,224*	*88*	*4.3*
Chiropractic providers	*8.8*	*279*	*24*	*1.2*
Radiology	42.8	546	234	11.4
Nonhospital providers	*39.8*	*345*	*137*	*6.7*
Hospital providers	*16.7*	*575*	*96*	*4.7*
Evaluation and management	81.6	280	228	11.2
Equipment and supplies	35.2	480	169	8.3
Nonhospital providers	*21.7*	*172*	*37*	*1.8*
Hospital providers	*19.3*	*683*	*132*	*6.4*
Drugs	44.4	341	151	7.4
Nonhospital providers	*31.2*	*265*	*83*	*4.0*
Hospital providers	*20.9*	*329*	*69*	*3.4*
Inpatient hospital facility services	2.0	7,436	151	7.4
Chiropractic manipulations	9.8	371	36	1.8
Pathology and laboratory services	7.3	273	20	1.0
Other services	19.6	528	104	5.1
Unknown	21.6	69	15	0.7
Total	100.0%	$2,043	$2,043	100.0%

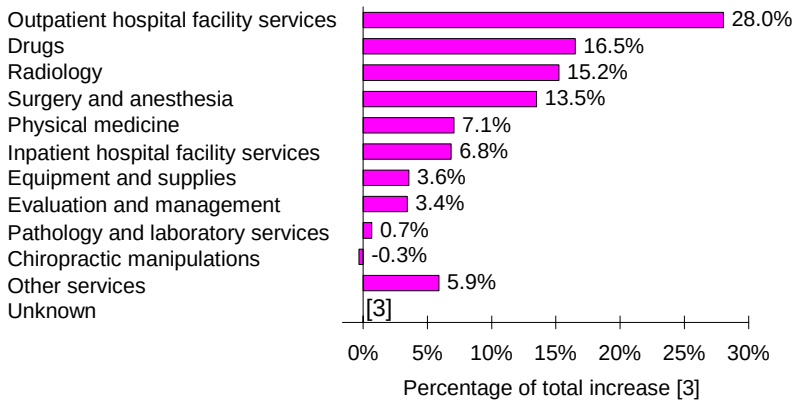
1. Computed from data from a large insurer (see Appendix C).
2. See text for additional detail.

Major contributors to overall cost increase

Drugs and outpatient hospital facility services showed the largest percent increases in cost per total claim from 1997 to 2003. These two service groups also contributed the largest amounts to the overall increase in cost per total claim.

- Expenditures per total claim increased 102 percent for drugs, 75 percent for outpatient hospital facility services and 44 percent for radiology.
- Of the $404 increase in total medical cost per claim, outpatient hospital facility services accounted for $130 (28 percent), drugs $77 (17 percent), radiology $71 (15 percent), and surgery and anesthesia $63 (14 percent).
- For drugs, radiology, surgery and anesthesia, and physical medicine, nonhospital providers contributed 63 to 80 percent of the increase in cost per total claim.
- For drugs, cost per total claim increased 142 percent for nonhospital providers as opposed to 69 percent for hospital providers.

Figure 4.2 Contributions of service groups to overall change in total medical cost per total claim between injury years 1997 and 2003 [1]



Service group [2]	Percent change in cost per total claim	Amount of change in cost per total claim	Percentage of total cost increase [3]
Outpatient hospital facility services	75.1%	$130	28.0%
Drugs	102.4	77	16.5
Nonhospital providers	*142.3*	*48*	*10.5*
Hospital providers	*69.2*	*28*	*6.1*
Radiology	43.3	71	15.2
Nonhospital providers	*49.9*	*46*	*9.9*
Hospital providers	*35.0*	*25*	*5.4*
Surgery and anesthesia	21.3	63	13.5
Nonhospital providers	*20.6*	*50*	*10.8*
Hospital providers	*24.7*	*13*	*2.7*
Physical medicine	13.3	33	7.1
Physical therapist providers	*17.0*	*23*	*5.0*
Hospital providers	*16.1*	*12*	*2.5*
Chiropractic providers	*- 9.3*	*-2*	*- 0.5*
Inpatient hospital facility services	26.7	32	6.8
Equipment and supplies	10.9	17	3.6
Nonhospital providers	*3.1*	*1*	*0.2*
Hospital providers	*13.3*	*15*	*3.3*
Evaluation and management	7.5	16	3.4
Pathology and laboratory services	18.4	3	0.7
Chiropractic manipulations	- 3.8	-1	- 0.3
Other services	35.8	27	5.9
Unknown	-79.9	-59	[3]
Total	24.7%	$404	100.0%

1. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Costs are adjusted for average wage growth between 1997 and 2003. (See Appendix C.)
2. See text for additional detail.
3. The percent contribution to the total cost change is computed over services with reported (known) type.

Figure 4.3 Components of change in cost per total claim between injury years 1997 and 2003 [1]

Service group [2]	Change in percentage of claims with service	Change in cost of service per claim with service	Change in cost of service per total claim [3]
Outpatient hospital facility servs. (28.0%)	26.6%	38.3%	75.1%
Drugs (16.5%)	19.1%	70.0%	102.4%
Nonhospital providers (10.5%)	*29.4%*	*87.2%*	*142.3%*
Hospital providers (6.1%)	*16.7%*	*45.0%*	*69.2%*
Radiology (15.2%)	7.6%	33.2%	43.3%
Nonhospital providers (9.9%)	*4.6%*	*43.3%*	*49.9%*
Hospital providers (5.4%)	*14.3%*	*18.1%*	*35.0%*
Surgery and anesthesia (13.5%)	6.1%	14.4%	21.3%
Nonhospital providers (10.8%)	*15.5%*	*4.4%*	*20.6%*
Hospital providers (2.7%)	*-19.8%*	*55.5%*	*24.7%*
Physical medicine (7.1%)	-1.4%	14.9%	13.3%
Physical therapist providers (5.0%)	*2.6%*	*14.1%*	*17.0%*
Hospital providers (2.5%)	*-4.2%*	*21.2%*	*16.1%*
Chiropractic providers (-0.5%)	*-0.4%*	*-9.0%*	*-9.3%*
Inpatient hospital facility servs. (6.8%)	9.2%	16.1%	26.7%
Equipment and supplies (3.6%)	-13.1%	27.6%	10.9%
Nonhospital providers (0.2%)	*-18.8%*	*26.9%*	*3.1%*
Hospital providers (3.3%)	*-3.5%*	*17.5%*	*13.3%*
Evaluation and management (3.4%)	-1.8%	9.5%	7.5%
Pathology and laboratory servs. (0.7%)	-10.1%	31.7%	18.4%
Chiropractic manipulations (-0.3%)	-1.3%	-2.5%	-3.8%
Other services (5.9%)	35.7%	0.1%	35.8%
Total (100.0%)	0.0%	24.7%	24.7%

1. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Costs are adjusted for average wage growth between 1997 and 2003. (See Appendix C.)
2. See text for additional detail. Percent contribution to overall cost increase per total claim (from Figure 4.2) is in parentheses.
3. Equal to the "product" of the first two columns. Technically, col. 3 = (1 + col. 1) x (1 + col. 2) - 1. An approximation is that column 3 is roughly equal to the sum of the first two columns.

Analysis of cost change per total claim

The change in the cost of a type of service per total claim[25] can be viewed as the product of the change in the percentage of claims with that service and the change in the average cost of the service for claims with the service (the latter is analyzed more fully below).

- For all service groups except "other services" (combining provider types), the predominant factor was the change in the average cost of the service for claims with the service.
  - ➢ For drugs, for example, the 102-percent increase in cost per total claim resulted from a 70-percent increase in the average cost of drugs per claim with drugs and a 19-percent increase in the percentage of claims with drugs.
- Significant variation occurs by provider type.
  - ➢ For radiology provided by hospitals, for example, the 35-percent increase in cost per total claim resulted from a 14-percent increase in the percentage of claims with this service, combined with an 18-percent increase in the cost of this service per claim with the service. For nonhospital providers of radiology, the 50-percent increase in cost per total claim came from a 5-percent increase in the percentage of claims with the service and a 43-percent increase in cost per claim with service.

Analysis of cost change for selected service groups

The change in the average cost of a service per claim with that service[26] is the product of the changes in average units of service per claim, average cost per unit (for a fixed service mix) and

[25] Column 1 of Figure 4.2.

[26] Second column of bars in Figure 4.3.

the expensiveness of the service mix. Changes in average service costs were divided into these components for those service groups for which it was feasible (see Appendix C). Figure 4.4 shows the results.

A note on service mix: Each service group encompasses a range of particular services that vary widely in cost because of complexity, skill demands, and use of time and other resources. The expensiveness of the service mix measures the degree to which the services within the group tend to be the more costly ones.[27]

- For radiology and for surgery and anesthesia, an increasingly expensive service mix was responsible for most or all of the increase in cost per claim with service.
  - For radiology, a more expensive service mix was responsible for 25 percentage points of the 32-percent increase in average cost per claim with service.
  - For surgery and anesthesia, an 18-percent increase in the expensiveness of the service mix was offset by a 5-percent decrease in units of service, with only a slight change in cost per unit, to produce a 14-percent increase in average cost per claim with service. The shift toward more expensive services occurred primarily within the surgery component of this service group (not shown here).

- For physical medicine, a 9-percent increase in cost per unit of service was the main contributor to the 15-percent increase in cost per claim with service.

- For evaluation and management (E&M) overall, a 10-percent increase in cost per claim with service came mostly from a 7-percent increase in cost per unit. Unit-cost increases ranging from 4 to 9 percent occurred for the four major subgroups of this service group. But apart from this, major variations occurred:
  - A striking result is that new-patient office visits per claim with E&M service fell by 53 percent, while the other three E&M subgroups showed increases of 14 to 22 percent in their frequency per claim with E&M service. These percentages do not tell the whole story. The decrease in frequency of new-patient office visits occurred almost completely between injury years 2002 and 2003, and was accompanied by a nearly equal increase, in absolute terms, in the frequency of established-patient visits. The percent change for this subgroup is smaller than for new-patient visits because of higher initial frequency.
  - Since reimbursement limits are lower for established-patient visits than for new-patient visits, it seems reasonable to infer that this change resulted from increased compliance with rules for coding the two types of visits.
  - The 2-percent increase in service mix expensiveness for E&M overall reflects changes in service mix both within and across the four subgroups. Office consultations are the most expensive of the four subgroups, followed by emergency department visits, new-patient office visits and established-patient office visits.[28] Thus, the increased use of consultations and emergency department visits tends to increase the expensiveness of the overall E&M service mix, while the shift from new-patient to established-patient office visits tends to decrease it.

- For chiropractic manipulations, a small decrease in cost per claim with service resulted primarily from a 12-percent decrease in cost per unit and a roughly offsetting increase in units per claim.

- The decrease in cost per unit for chiropractic manipulations was caused largely by the introduction of new RVUs in 2001.[29]

- Significant variation occurred by provider type. For example, for radiology, the shift to a more expensive service mix was much stronger for nonhospital providers, but for surgery and anesthesia, this shift was stronger for hospital providers.

[27] See note 4 in Figure 4.4.

[28] Based on computations on the data.

[29] The 2001 RVUs for chiropractic manipulations were lower than the previous ones. The RVUs also fell for surgery and anesthesia, which had a 1-percent decrease in cost per unit for nonhospital providers. The year-by-year trends in cost per unit show a clear decrease between 2000 and 2001 for chiropractic manipulations, but not for surgery and anesthesia.

Figure 4.4 Components of change in cost of selected service groups between injury years 1997 and 2003 [1]

Service group [2]	Change in units of service per claim	Change in cost per unit of service [3]	Change in expensiveness of service mix [4]	Change in cost of service per claim with service [5]
Radiology	3.0%	3.1%	25.4%	33.2%
Nonhospital providers	6.1%	6.5%	26.8%	43.3%
Hospital providers	-0.2%	14.0%	3.7%	18.1%
Surgery and anesthesia	-5.0%	1.7%	18.4%	14.4%
Nonhospital providers	-7.0%	-1.0%	13.4%	4.4%
Hospital providers	-13.9%	16.2%	55.4%	55.5%
Physical medicine	3.7%	8.8%	1.8%	14.9%
Physical therapist providers	7.4%	-1.1%	7.5%	14.1%
Hospital providers	8.3%	14.5%	-2.3%	21.2%
Chiropractic providers	-12.0%	-0.5%	4.0%	-9.0%
Evaluation and managment	1.0%	6.6%	1.7%	9.5%
Office visits (new patient) [6]	-53.4%	4.0%	0.4%	-51.4%
Office visits (established patient) [6]	13.8%	8.7%	3.9%	28.5%
Office consultations [6]	22.2%	4.0%	-1.3%	25.5%
Emergency department vists [6]	20.8%	4.6%	12.1%	41.6%
Chiropractic manipulations [7]	12.7%	-12.2%	-1.0%	-2.0%

1. Developed statistics computed from data from a large insurer. Results are adjusted to reflect a fixed distribution of claims by gender, age and type of injury over time. Costs are adjusted for average wage growth between 1997 and 2003. (See Appendix C.)
2. See text for additional detail.
3. Computed for a fixed service mix within the service group (see Appendix C).
4. The "expensiveness of the service mix" is the average cost per unit of service for the overall service group as affected by changes in the service mix within the group, holding constant the cost per unit of particular services (see Appendix C).
5. Equal to the "product" of the first three columns. Technically, col. 4 = (1 + col. 1) x (1 + col. 2) x (1 + col. 3) - 1. An approximation is that column 4 is roughly equal to the sum of the first three columns.
6. For the four subgroups under evaluation and management, units of service and cost per claim with service (and the associated changes) are expressed relative to the number of claims with any evaluation and management services.
7. The changes for chiropractic manipulations refer to 1998 to 2003 because service coding changes prevent comparisons before 1998.

5

Vocational rehabilitation

This chapter gives data on vocational rehabilitation (VR) services in Minnesota's workers' compensation system.

Major findings

- Participation in vocational rehabilitation rose from 15 percent of paid indemnity claimants in 1997 to 23 percent for 2003. A projected 6,290 claimants injured in 2003 will receive VR services. (Figure 5.1)
- The total cost of VR services for 2003, $39 million, was about 2.7 percent of workers' compensation system cost. (Figure 5.2)
- Adjusted for average wage growth, the average cost of VR services fell from 2001 to 2003, but was about the same in 2003 as in 1998. (Figure 5.2)
- The average time from injury to start of VR services fell from 1998 to 2001, but was steady from 2001 to 2003; the average duration of services increased steadily from 1998 to 2003. (Figures 5.3, 5.4)
- From 1998 to 2003, the percentage of VR participants with no job at plan closure increased from 26 percent to 34 percent. (Figure 5.5)
- The average VR participant returning to work receives a wage about the same as their pre-injury wage, but this varies widely among individuals. (Figure 5.7)

Background

Vocational rehabilitation is the third type of workers' compensation benefit, supplementing medical and indemnity benefits. VR services are provided to injured workers who need help in returning to work because of their injuries and whose employers are unable to offer them suitable employment.

VR services include:

- vocational evaluation
- counseling
- job analysis
- job modification
- job development
- job placement
- vocational testing
- transferable skills analysis
- job-seeking skills training
- on-the-job training
- retraining.

VR services are provided by "qualified rehabilitation consultants" (QRCs) registered by DLI. QRCs determine whether injured workers are eligible for VR services, develop VR plans for those determined eligible and coordinate service delivery under these plans. Eligibility is determined in a VR consultation, which is typically done within certain timelines or if requested by the employee or employer. VR plan costs are generated by hourly charges for services by QRCs and vendors and the costs for certain services, such as retraining, on-the-job training programs and vocational testing.

Time period covered

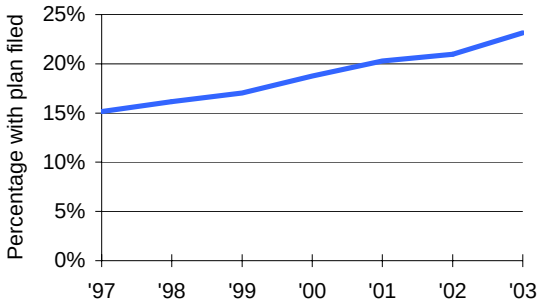
The data in this chapter comes from VR documents filed with DLI for each claim with VR activity. Since the VR system experienced major changes in the early and middle 1990s, the figures presenting data by year of plan closure begin with closure year 1998.

Participation rate

The VR participation rate increased steadily from 1997 to 2003.

- During this six-year period, the participation rate increased from 15.1 percent to 23.2 percent.
- About 6,290 individuals injured in 2003 are expected to receive VR services (some of these people have not yet begun services).
- Despite the increasing VR participation rate, the actual number of claimants with VR plans decreased from 2000 to 2003, because the number of indemnity claims decreased.

Figure 5.1 Percentage of paid indemnity claims with a VR plan filed, injury years 1997-2003 [1]



Injury year	Percentage with plan
1997	15.1%
2000	18.8
2001	20.3
2002	21.0
2003	23.2

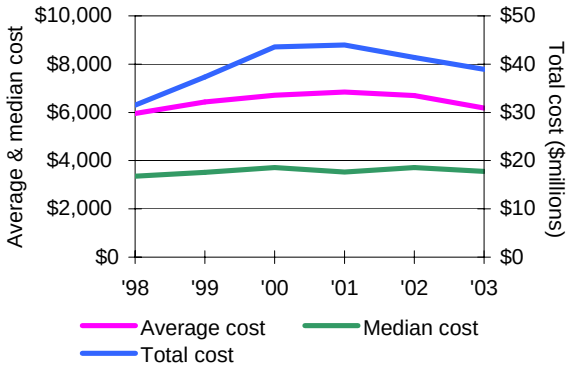
1. Data from DLI. Statistics are developed (see Appendix C).

Cost

Adjusted for average wage growth, the average and total costs of VR services fell between injury years 2001 and 2003, after increasing from 1998 to 2001.

- Total service cost fell from 2001 to 2003, because of a decreasing number of participants and decreasing average plan cost.
- Average plan cost was about the same in 2003 as in 1998; total cost was 26 percent higher; median plan cost showed relatively little change.
- The estimated total cost of VR for 2003, $38.9 million, was about 2.7 percent of total workers' compensation system cost.

Figure 5.2 VR plan costs, adjusted for wage growth, injury years 1998-2003 [1]



Injury year	Average cost	Median cost	Total cost ($millions)
1998	$5,950	$3,360	$31.5
2000	6,710	3,720	43.6
2001	6,840	3,530	44.0
2002	6,700	3,720	41.4
2003	6,180	3,550	38.9

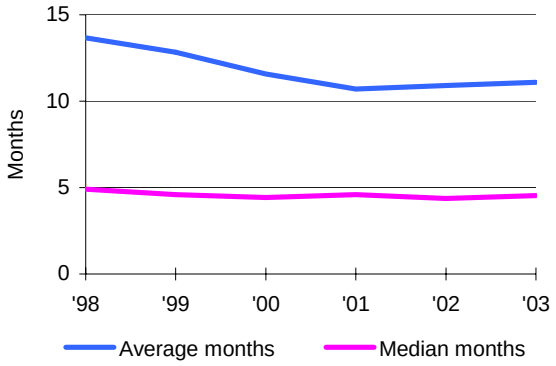
1. Developed statistics from DLI data (see Appendix C). Costs are adjusted for average wage growth between the respective year and 2003.

Timing of services

The success of VR is closely linked to prompt service provision. The average time from injury to the start of VR services was steady from 2001 to 2003, after decreasing from 1998 to 2001.

- From 1998 to 2001, the average time from injury to the start of VR services declined 22 percent, but remained near 11 months from 2001 to 2003. The median time was somewhat under five months for the whole period.
- In 2003, one-third of VR service starts were within three months of the date of injury.
- Compared to participants who started VR more than one year after injury, those who started within six months (among plan closures in 2003) had:
  - lower VR costs by 17 percent ($5,830 vs. $7,050)[30];
  - shorter VR service durations by 12 percent (12.5 months vs. 14.3 months); and
  - greater chances of returning to work with their pre-injury employer (49 percent vs. 32 percent).

Figure 5.3 Time from injury to start of VR services, plan-closure years 1998-2003 [1]



Service start year	Average months	Median months
1998	13.7	4.9
2000	11.6	4.4
2001	10.7	4.6
2002	10.9	4.4
2003	11.1	4.5

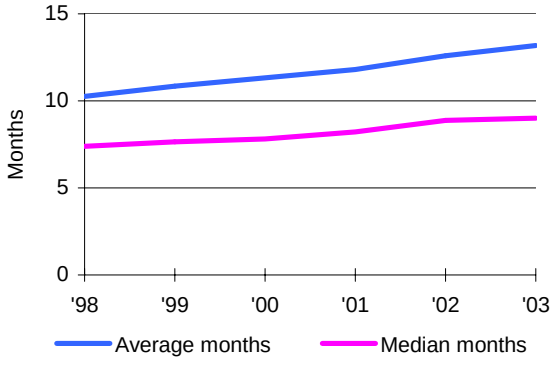
1. Data from DLI.

Service duration

VR service duration, the time from the start to the end of the plan, has increased steadily since 1998.

- Average service duration increased 29 percent from 1998 to 2003. Median duration increased 22 percent. The recent increases may indicate that workers need more extensive VR services in a poor job market.
- Among plan closures in 2003, average service duration was lowest for participants returning to work with their pre-injury employer (nine months), higher for those going to a different employer (16 months) and highest for those whose plans closed before returning to work (17 months).

Figure 5.4 VR service duration, plan-closure years 1998-2003 [1]



Plan-closure year	Average months	Median months
1998	10.3	7.4
2000	11.3	7.8
2001	11.8	8.2
2002	12.6	8.9
2003	13.2	9.0

1. Data from DLI.

[30] These figures are limited to private service-providers.

Return-to-work status

The percentage of VR participants who had found a job at plan closure decreased during the past five years.

- From 1998 to 2003, the percentage with no job at plan closure increased from 26 percent (1,190 participants) to 34 percent (2,200).
- The increased percentage of participants without a job was accompanied by a comparable decrease in the percentage with a job at a different employer.
- Among 2003 plan closures, the average cost of services for participants returning to work with their pre-injury employer ($3,450) was less than half the cost for those going to a different employer ($9,030) and for those not returning to work ($8,080).[31]

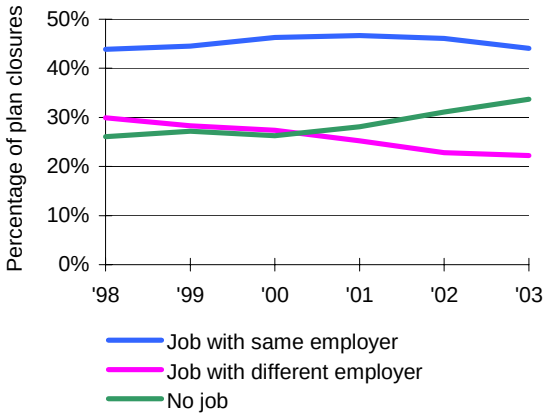
Type of return-to-work job

Among VR participants returning to work, the percentage returning to the same type of job as their pre-injury job increased steadily during the past five years, with a corresponding decrease in the percentage returning to a different type job.

- From 1998 to 2003, among participants with a job at plan closure, the percentage with the same type job (without modifications) rose from 40 to 50 percent, while the percentage with a different type job fell from 47 to 37 percent.
- Over the same period, the percentage with the same type of job (with modifications) remained steady at 13 to 15 percent.
- Most placements in the same type of job (with or without modifications) are with the pre-injury employer; most placements in a different type of job are with a different employer. Consequently, a decrease in the percentage of participants finding a job with a different employer, along with a steady percentage returning to the same employer (Figure 5.5), implies a decrease (among those finding a job) in the percentage going to a different type of job (Figure 5.6).

[31] These figures are limited to private service-providers.

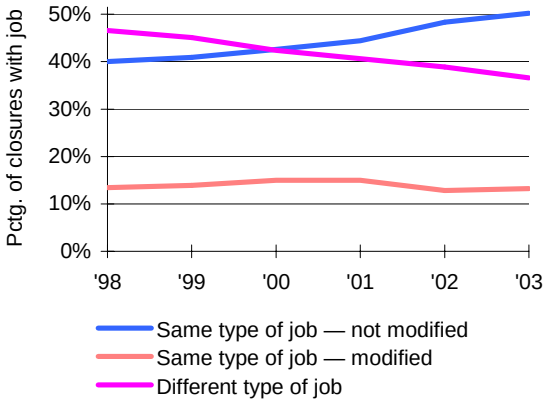
Figure 5.5 Return-to-work status, plan-closure years 1998-2003 [1]



Plan-closure year	Job with same employer	Job with different employer	No job
1998	43.9%	29.9%	26.1%
2000	46.3	27.4	26.3
2001	46.7	25.2	28.1
2002	46.1	22.8	31.1
2003	44.1	22.2	33.7

1. Data from DLI.

Figure 5.6 Type of return-to-work job, plan-closure years 1998-2003 [1]



Plan-closure year	Same type of job		Different type of Job
	Not Modified	modified	
1998	40.0%	13.4%	46.6%
2000	42.6	15.0	42.4
2001	44.4	15.0	40.6
2002	48.3	12.8	38.9
2003	50.2	13.2	36.6

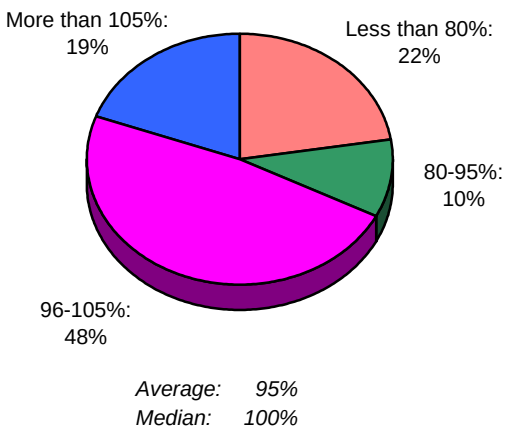
1. Data from DLI.

Return-to-work wages

The average return-to-work (RTW) wage of VR participants is about the same as their pre-injury wage. However, the RTW wage ratio varies widely.

- In 2003, more than two-thirds of participants returning to work received a wage of at least 95 percent of their pre-injury wage. About one-third made less than 95 percent of their pre-injury wage, with most of those earning less than 80 percent of their pre-injury wage.
- For plan closures in 2003, the average RTW wage ratio was:
  - ➢ higher for participants who returned to their pre-injury employer (99 percent) than for those who went to a different employer (86 percent); and
  - ➢ higher for service durations less than six months (99 percent) than for longer service durations (e.g., 86 percent for durations longer than 18 months).
- Between plan-closure years 1998 to 2000 (combined) and 2003, the average RTW wage ratio fell from 102 percent to 95 percent, while the median remained at 100 percent.

Figure 5.7 Ratio of return-to-work wage to pre-injury wage for participants returning to work, plan-closure year 2003 [1]



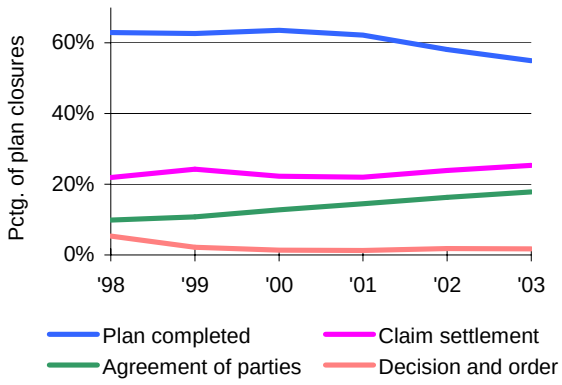
1. Data from DLI.

Reasons for plan closure

A majority of plans close because they are completed, but the percentage of plans closing for other reasons has risen since 2000.

- The proportion of plans closed because of plan completion fell from 64 percent to 55 percent between 2000 and 2003.
- The proportion of plans closed by agreement of the parties rose from 10 to 18 percent from 1998 to 2002.
- By definition, plan completion always involves a return to work. For plans closed for reasons other than completion in 2002, participants returned to work only 27 percent of the time.
- Plan costs vary by type of closure: among closures involving private QRCs in 2003, completed plans averaged $4,280; settlements, $9,880; decision and orders, $7,530; and agreements, $6,780.

Figure 5.8 Reason for plan closure, plan-closure years 1998-2003 [1]



Plan-closure year	Plan completed	Claim settlement	Agreement of parties	Decision and order
1998	62.9%	21.9%	9.9%	5.3%
1999	62.7	24.3	10.8	2.2
2000	63.6	22.3	12.8	1.4
2001	62.2	22.0	14.5	1.3
2002	58.1	23.9	16.3	1.8
2003	55.0	25.4	17.8	1.7

1. Data from DLI.

6

Disputes and dispute resolution

This chapter presents data on workers' compensation disputes and dispute resolution.

Major findings

- The overall dispute rate increased from 15.0 percent of filed indemnity claims in 1997 to 18.0 percent in 2003, a 20-percent increase.[32] (Figure 6.1)
- The rate of denial of filed indemnity claims remained between 14 and 17 percent from 1997 to 2003. (Figure 6.3)
- For wage-loss claims filed in 2003, the proportion with "prompt first action" (payment initiation or denial within the legal time limit) was 86 percent, an increase from 84 percent in 2001 and 81 percent in 1997. (Figure 6.4)
- The percentage of paid indemnity claims with claimant attorney fees rose from 13.8 percent in 1998 to 16.5 percent in 2003, a 20-percent increase. (Figure 6.6)
- From 1997 to 2003, as a percentage of total benefits, defense legal costs rose from 6.3 percent to 7.3 percent while claimant legal costs rose from 4.3 to 4.5 percent. (Figure 6.7)
- For 2003, total claimant and defense legal costs were about $106 million, representing 7.3 percent of total workers' compensation system cost. (Figure 6.7)

Background

The following basic information is necessary for understanding the figures in this chapter. See Appendix A for more detail.

Types of disputes

Disputes in Minnesota's workers' compensation system generally occur over five types of issues:[33]

- denial of primary liability;
- eligibility for and amount of monetary benefits;
- discontinuance of wage-loss benefits;
- medical issues; and
- rehabilitation issues.

Dispute-resolution process

Depending on the nature of the dispute and the wishes of the parties, dispute resolution may be facilitated by a dispute-resolution specialist in the Customer Assistance (CA) unit of the Department of Labor and Industry (DLI) or by a judge in the Office of Administrative Hearings (OAH). Decisions from OAH can be appealed to the Workers' Compensation Court of Appeals and then to the Minnesota Supreme Court.

CA and OAH carry out a variety of dispute-resolution activities:

Customer Assistance activities

Informal intervention — This process, which can be initiated by any party to a dispute, usually involves phone calls or correspondence with the

[32] A "percent increase" means the proportionate increase in the initial percentage, not the number of percentage points of increase. For example, an increase from 10 percent to 15 percent is a 50-percent increase.

[33] Disputes also occur over miscellaneous other types of issues, such as attorney fees, which are not considered in this report.

parties to avoid a longer, more formal and costly process.

Dispute certification — In a medical or rehabilitation dispute, CA must certify that a dispute exists and that informal intervention did not resolve the dispute before an attorney may charge for services.

Mediation — A mediation occurs when all parties agree to participate and may be used to deal with any type of dispute. The mediator, a CA specialist, works to facilitate agreement among the parties and formally records its terms.

Administrative-conference and nonconference decision-and-orders — An administrative conference is an expedited, informal proceeding where parties present and discuss viewpoints in a dispute. CA conducts administrative conferences on rehabilitation issues and on medical issues involving $1,500 or less. If agreement is not achieved, the CA specialist issues a "decision and order." If CA believes a dispute under its jurisdiction does not require a conference, it may issue a "nonconference decision and order."

Office of Administrative Hearings activities

Settlement conference — OAH conducts settlement conferences in litigated cases to achieve a negotiated settlement,where possible, without a formal hearing.

Administrative conference — OAH conducts administrative conferences on most discontinuance disputes and on medical disputes involving more than $1,500. The OAH judge conducting the conference issues a "decision and order."

Formal hearing — OAH conducts formal hearings on disputes presented on claim petitions (see "claim petition disputes" below) and other petitions where resolution through a settlement conference is not possible. OAH also conducts hearings on some discontinuance disputes, disputes referred by CA because they do not seem amenable to less formal resolution, and disputes over miscellaneous issues such as attorney fees and pre-hearing disputes. OAH also conducts hearings *de novo* when a party disagrees with an administrative-conference or nonconference decision and order.

Counting disputes

Four "dispute" categories are used in this report:

Claim petition disputes —. Disputes over primary liability and benefit issues are typically filed on a claim petition, which triggers a formal hearing or settlement conference at OAH. Some medical and vocational rehabilitation disputes are also filed on claim petitions.

Discontinuance disputes — These disputes are most often initiated when the claimant (usually by phone) requests an administrative conference in response to the insurer's declared intention to discontinue temporary total or temporary partial benefits. These disputes may also be presented on the claimant's *Objection to Discontinuance* or the insurer's petition to discontinue benefits, which leads to a hearing at OAH.

Medical Requests — Medical disputes are often filed on a *Medical Request* form, which triggers an administrative conference at CA or OAH after CA certifies the dispute.

Rehabilitation Requests — Vocational rehabilitation disputes are often filed on a *Rehabilitation Request* form, which leads to an administrative conference at CA after CA certifies the dispute.

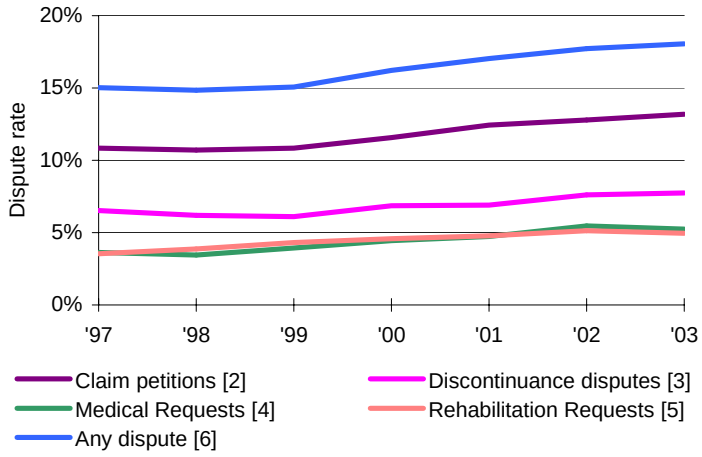
Many disputes, especially those handled informally by CA through mediation or other means, are not counted in these categories.

Dispute rates

After a period of stability from 1997 to 1999, the dispute rate rose sharply from 1999 to 2003.

- The overall dispute rate increased from 15.0 percent in 1997 to 18.0 percent in 2003, a 20-percent increase.[34] During the same period:
  - ➢ The rate of claim petitions rose 22 percent.
  - ➢ The rate of discontinuance disputes rose 19 percent.
  - ➢ The rate of *Medical Requests* rose 44 percent.
  - ➢ The rate of *Rehabilitation Requests* rose 40 percent.

Figure 6.1 Incidence of disputes, injury years 1997-2003 [1]



Injury year	Dispute rate				
	Claim petitions [2]	Discontinuance disputes [3]	Medical Requests [4]	Rehabilitation Requests [5]	Any dispute [6]
1997	10.8%	6.5%	3.6%	3.5%	15.0%
1999	10.8	6.1	3.9	4.3	15.1
2000	11.6	6.9	4.4	4.6	16.2
2001	12.4	6.9	4.7	4.8	17.0
2002	12.8	7.6	5.5	5.1	17.7
2003	13.2	7.8	5.2	4.9	18.0

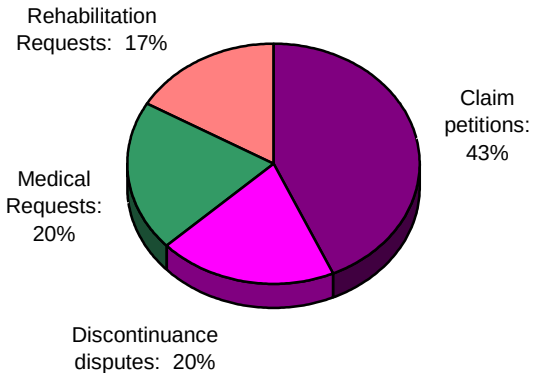
1. Developed statistics from DLI data (see Appendix C).
2. Percentage of filed indemnity claims with claim petitions. (Filed indemnity claims are claims for indemnity benefits, whether ultimately paid or not.)
3. Percentage of paid wage-loss claims with discontinuance disputes.
4. Percentage of paid indemnity claims with *Medical Requests.*
5. Percentage of paid indemnity claims with *Rehabilitation Requests.*
6. Percentage of filed indemnity claims with any disputes.

Dispute types

Claim petitions constitute not quite half (43 percent) of all disputes.

- Discontinuance disputes, *Medical Requests,* and *Rehabilitation Requests* make up roughly equal shares of the remaining disputes.

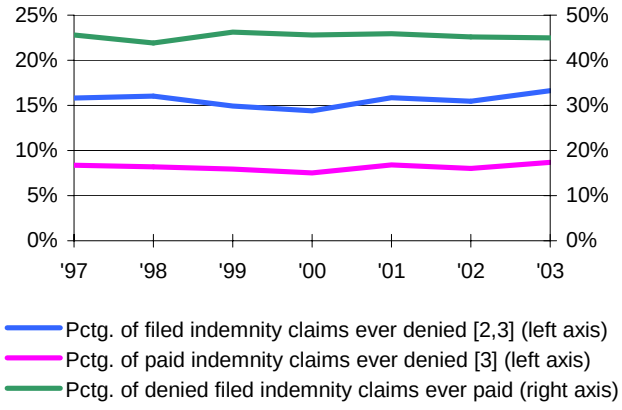
Figure 6.2 Dispute types as share of total, disputes filed in 2003 [1]



1. Data from DLI.

[34] See note 32 on p. 31.

Figure 6.3 Indemnity claim denial rates, injury years 1997-2003 [1]



Injury year	Filed indemnity claims [2] Total	Filed indemnity claims [2] Pctg. ever denied [3]	Paid indemnity claims Total	Paid indemnity claims Pctg. ever denied [3]	Pctg. of denied filed indemnity claims ever paid
1997	38,900	15.8%	33,500	8.4%	45.6%
2000	39,700	14.4	34,600	7.5	45.6
2001	36,600	15.9	31,700	8.4	45.9
2002	33,800	15.5	29,400	8.0	45.2
2003	31,500	16.6	27,200	8.7	45.0

1. Developed statistics from DLI data (see Appendix C).
2. Filed indemnity claims are claims for indemnity benefits, including claims paid and claims never paid.
3. Denied claims include claims denied and never paid, claims denied but eventually paid and claims initially paid but later denied.

Denials

Denials of primary liability are of interest because they frequently generate disputes. Denials are also important because if they are improperly made, workers' compensation fails in its purpose of providing benefits to injured workers. Denial rates have fluctuated somewhat over the past eight years with no clear trend.

- The denial rate among filed indemnity claims has remained between 14 and 17 percent since 1997.
- The proportion of paid indemnity claims ever denied has been roughly 8 to 9 percent since 1997. (These include cases denied and then paid or paid and then denied.)
- Both denial rates fell from 1997 to 2000 and rose from 2000 to 2003.
- Among filed indemnity claims that were denied, the proportion ever paid has ranged from 44 to 46 percent.

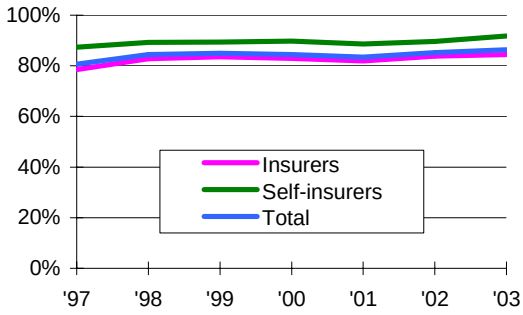
Prompt first action

Insurers must either begin payment on a wage-loss claim or deny the claim within 14 days of when the employer has knowledge of the injury.[35] This "prompt first action" is important not only for the sake of the injured worker, but also because disputes are less likely if the insurer responds promptly to the claim. The prompt-first-action rate has increased since 1997.[36]

- The fiscal year 2003 prompt-first-action rate was about 86 percent. This is up from 84 percent in 2001 and 81 percent in 1997.

- The prompt-first-action rate is higher for self-insurers than for insurers. This is to be expected to the extent that claims administration occurs in-house with self-insurers (avoiding the need to communicate with an insurer), although self-insurers often use third-party administrators to handle claims. Another factor is that self-insurers more directly realize any financial benefits of prompt claims administration that result from lower dispute frequency.

Figure 6.4 Percentage of lost-time claims with prompt first action, fiscal claim-receipt years 1997-2003 [1]



Fiscal year of claim receipt	Insurers	Self-insurers	Total
1997	78.5%	87.3%	80.7%
2000	82.9	89.7	84.5
2001	81.9	88.6	83.5
2002	83.8	89.6	85.2
2003	84.5	91.8	86.4

1. Computed from DLI data by DLI Compliance Services. See DLI Compliance Services, *2003 Prompt First Action Report.* Fiscal claim-receipt year means the fiscal year in which DLI received the claim. Fiscal years are from July 1 through June 30; for example, July 1, 2002 through June 30, 2003 is fiscal year 2003.

[35] Minn. Stat. §176.221.

[36] To improve system performance, DLI Compliance Services publishes the annual *Prompt First Action Report* on the prompt-first-action performance of individual insurers and of the overall system.

Dispute resolution proceedings

Dispute resolution statistics reflect the fact that DLI Customer Assistance is concerned with preventing disputes and resolving disputes in their early stages, while the Office of Administrative Hearings and the Workers' Compensation Court of Appeals handle smaller numbers of more complex cases.

- The most frequent dispute resolution activity is informal interventions by CA.
- Next most frequent are settlement conferences and administrative conferences at OAH.
- In fiscal year 2004, CA determined 2,336 disputes to be noncertified, representing 45 percent of all certification decisions.
- About two-thirds of the dispute resolutions by CA were by intervention.

Figure 6.5 Dispute resolution activities, fiscal year 2004 [1]

DLI Customer Assistance	
Dispute prevention and resolution activities	
Interventions [2]	12,887
Mediations	538
Administrative conferences	853
Nonconference decisions	2
Dispute certification decisions [3]	*5,233*
Disputes certified [4]	2,897
Disputes not certified [5]	2,336
Dispute resolutions [6]	*4,010*
Resolutions by intervention [2]	2,694
Mediation awards and other agreements via conference or mediation	684
Administrative conference decisions	630
Nonconference decisions	2
Office of Administrative Hearings	
Settlement conferences	2,661
Administrative conferences — discontinuance	1,506
Administrative conferences — medical and rehabilitation	633
Hearings [7]	914
Workers' Compensation Court of Appeals	
Cases received [8]	236

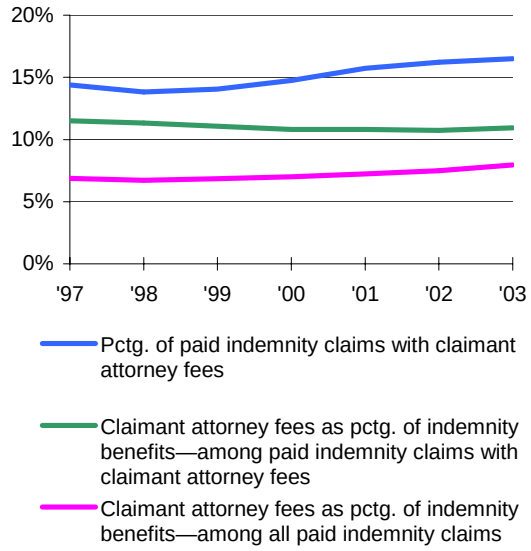
1. Data from DLI, OAH and the Workers' Compensation Court of Appeals.
2. Interventions include instances of providing information or assistance to prevent a potential dispute and interventions by phone, correspondence, or walk-in contact to resolve a dispute and/or determine whether a dispute should be certified. A "potential dispute" is a case in which a party to a claim contacts CA and, in the judgment of the CA specialist, a dispute would likely have arisen without CA involvement. In most of these cases, there has been little or no attorney involvement before CA was contacted. An intervention to prevent or resolve a dispute often occurs as part of the process of determining whether a dispute should be certified.
3. These numbers represent a result of "interventions" counted above; they do not represent additional activity.
4. Instances where CA has determined that a medical or rehabilitation dispute exists and has not resolved the dispute.
5. Instances where CA has either determined there is no medical or rehabilitation dispute or has intervened and resolved the dispute.
6. These numbers represent results of "dispute prevention and resolution activities" counted above; they do not represent additional activity.
7. Excludes attorney fee hearings.
8. Includes cases with and without hearings. Cases with hearings are usually disposed of by decisions but sometimes by settlement. Cases without hearings are usually disposed of by settlement but sometimes by decisions. Statistics are unavailable on the number of hearings.

Claimant attorney involvement

Claimant attorney involvement increased during the past five years.

- The percentage of paid indemnity claims with claimant attorney fees[37] rose from 13.8 percent in 1998 to 16.5 percent in 2003, a 20-percent increase.[38] This parallels a similar increase in the dispute rate. (Figure 6.1)
- Among paid indemnity claims with claimant attorney fees, the ratio of attorney fees to indemnity benefits fell from 1997 to 2000, but remained steady at just under 11 percent from 2000 to 2003.
- Among all paid indemnity claims, the ratio of attorney fees to indemnity benefits rose from 1997 to 2003, because of the increase in the percentage of claims with attorney fees.
- Total claimant attorney fees are estimated at $32 million for injury year 2003. This represents 2.2 percent of total workers' compensation system cost for that year.

Figure 6.6 Claimant attorney fees paid with respect to indemnity benefits, injury years 1997-2003 [1]



Injury year	Pctg. of paid indemnity claims with claimant attorney fees	Claimant attorney fees as pctg. of indemnity benefits: Among paid indemnity claims with claimant attorney fees	Claimant attorney fees as pctg. of indemnity benefits: Among all paid indemnity claims
1997	14.4%	11.5%	6.9%
1998	13.8	11.3	6.7
2000	14.8	10.8	7.0
2001	15.7	10.8	7.2
2002	16.2	10.7	7.5
2003	16.5	10.9	8.0

1. Developed statistics from DLI data. Includes claimant attorney fees determined as a percentage of indemnity benefits plus additional amounts awarded to the claimant attorney upon application to a judge. Because of certain data reporting issues, the percentage of paid indemnity claims with claimant attorney fees for 2003 was projected from the 2002 number using the trend in the dispute rate. See Appendix C.

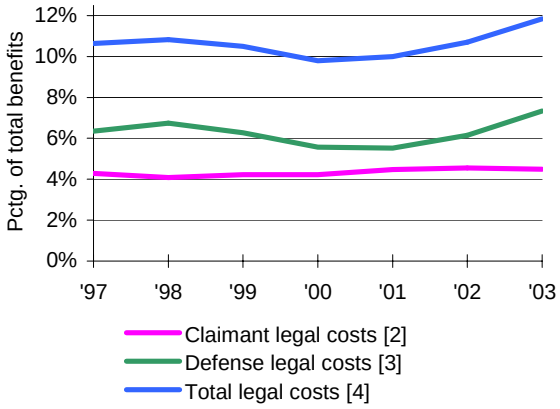
[37] See note 1 in figure.
[38] See note 32 on p. 31.

Claimant and defense legal costs

Claimant legal costs have remained stable relative to total benefits since 1997; defense legal costs have been more variable, rising significantly relative to total benefits between 2001 and 2003.

- From 1997 to 2003, relative to total benefits (indemnity, medical and rehabilitation):
  - claimant legal costs increased 5 percent;
  - defense legal costs increased 16 percent;
  - total legal costs increased 11 percent.[39]
- Defense legal costs rose 33 percent relative to benefits between 2001 and 2003; total legal costs rose 18 percent relative to benefits during the same interval.
- In 2003, claimant legal costs were equal to 4.5 percent of total benefits, as compared with 7.3 percent for defense legal costs.
- In 2003, total legal costs were about $106 million, or 7.3 percent of total workers' compensation system cost.

Figure 6.7 Total legal costs as percentage of total benefits, 1997-2003 [1]



Year	Claimant legal costs [2]	Defense legal costs [3]	Total legal costs [4]
1997	4.3%	6.3%	10.6%
2000	4.2	5.6	9.8
2001	4.5	5.5	10.0
2002	4.6	6.1	10.7
2003	4.5	7.3	11.8

1. Data from DLI and MWCIA. Includes claimant and defense attorney fees and other legal costs paid with respect to indemnity, medical and rehabilitation benefits. Benefits (in the denominator) include indemnity, medical and rehabilitation benefits. See Appendix C.
2. Numerator and denominator are developed statistics on an injury-year basis. See Appendix C.
3. Numerator and denominator are on a payment-year basis. See Appendix C.
4. Sum of first two columns.

[39] See note 32 on p. 31.

Appendix A

Glossary

Accident year — The year in which the accident or condition occurred giving rise to the injury or illness. In accident year data, all claims and costs are tied to the year in which the accident occurred. Accident year, used with insurance data, is equivalent to injury year, used with Department of Labor and Industry data.

Administrative conference — An expedited, informal proceeding where parties present and discuss viewpoints in a dispute. If agreement is not achieved, a "decision and order" is issued which is binding unless appealed. Currently, the Customer Assistance unit of the Department of Labor and Industry conducts administrative conferences on medical issues involving $1,500 or less and on vocational rehabilitation issues; the Office of Administrative Hearings conducts conferences on medical issues involving more than $1,500 and on discontinuance disputes presented on a *Request for Administrative Conference*.

Assigned Risk Plan (ARP) — The workers' compensation insurer of last resort, which insures employers unable to insure themselves in the voluntary market. The ARP is necessary because all non-exempt employers are required to have workers' compensation insurance or self-insure. The Department of Commerce operates the ARP through contracts with private companies for administrative services. The Department of Commerce sets the ARP premium rates, which are different from the voluntary market rates.

Claim petition — A form by which the injured worker contests a denial of primary liability or requests an award of indemnity, medical or rehabilitation benefits. In response to the claim petition, the Office of Administrative Hearings generally schedules a settlement conference or formal hearing.

Cost-of-living adjustment — An annual adjustment of temporary total disability, temporary partial disability, permanent total disability and dependents' benefits computed from the annual change in the statewide average weekly wage (SAWW). The percent adjustment is equal to the proportion by which the SAWW in effect at the time of the adjustment differs from the SAWW in effect one year earlier, not to exceed a statutory limit. For injuries on or after Oct. 1, 1995, the cost-of-living adjustment is limited to 2 percent a year and delayed until the fourth anniversary of the injury.

Customer Assistance (CA) — A unit in the Department of Labor and Industry that provides information and clarification on workers' compensation statute, rules and procedures; carries out a variety of dispute-prevention activities; conducts informal dispute-resolution activities including mediations; and holds administrative conferences on some issues. See "administrative conference".

Dependents' benefits — Benefits paid to dependents of a worker who has died from a work-related injury or illness. These benefits are equal to a proportion of the worker's gross pre-injury wage and are paid for a specified period of time, depending on the dependents concerned.

Developed numbers — Estimates of what the number of claims or their cost will be at a given maturity. Developed numbers are relevant for accident year, policy year and injury year data. They are obtained by applying development factors, based on historical rates of development of claim and cost figures, to tabulated numbers.

Development — The change over time in the reported number or cost of claims for a particular accident year, policy year or injury year. Claim costs develop whether the costs are

paid or incurred. The reported figures develop both because of the time necessary for claims to mature and, in the case of Department of Labor and Industry data, because of reporting lags.

Discontinuance of wage-loss benefits — The insurer may propose to discontinue wage-loss benefits (temporary total, temporary partial or permanent total disability) if it believes one of the legal conditions for discontinuance have been met. See "Notice of Intention to Discontinue," "Request for Administrative Conference," "Objection to Discontinuance," and "petition to discontinue benefits."

Experience modification factor — A factor computed by an insurer to modify an employer's premium on the basis of the employer's recent loss experience relative to the overall experience for all employers in the same payroll class. For statistical reliability reasons, the "mod" more closely reflects the employer's own experience for larger employers than for smaller employers.

Full-time-equivalent (FTE) covered employment — An estimate of the number of full-time employees that would work the same number of hours during a year as the actual workers' compensation covered employees, some of whom work part-time or over-time. It is used in computing workers' compensation claims incidence rates.

Hearing — A formal proceeding on a disputed issue or issues in a workers' compensation claim, at the Office of Administrative Hearings or Workers' Compensation Court of Appeals, after which the judge issues a decision that is binding unless appealed.

Indemnity benefit — A benefit to the injured or ill worker or survivors to compensate for wage loss, functional impairment or death. Indemnity benefits include temporary total disability, temporary partial disability, permanent partial disability and permanent total disability benefits; supplementary benefits; dependents' benefits; and, in insurance industry accounting, vocational rehabilitation costs.

Indemnity claim — A claim with paid indemnity benefits. Most indemnity claims involve more than three days of total or partial disability, since this is the threshold for qualifying for the temporary total disability or temporary partial disability benefits paid on most of these claims. Indemnity claims typically include medical costs in addition to indemnity costs.

Injury year — The year in which the injury occurred or the illness began. In injury year data, all claims, costs and other statistics are tied to the year in which the injury occurred. Injury year, used with Department of Labor and Industry data, is essentially equivalent to accident year, used with insurance data.

Mediation — A voluntary, informal proceeding conducted by the Customer Assistance Unit of the Department of Labor and Industry to facilitate agreement among the parties in a dispute. If agreement is reached, its terms are formally recorded. A mediation occurs when one party requests it and the others agree to participate. This often takes place after attempts at resolution by phone and correspondence have failed.

Medical cost — The cost of medical services and supplies provided to the injured or ill worker, including payments to providers and certain reimbursements to the worker. All reasonable and necessary medical costs related to the injury or illness are covered, subject to a maximum-fee schedule.

Medical-only claim — A claim with paid medical costs and no indemnity benefits.

Medical dispute — A dispute over a medical issue, such as choice of providers, nature and timing of treatments or appropriate payments to providers.

Medical Request — A form by which a party to a medical dispute requests assistance from the Department of Labor and Industry (DLI) in resolving the dispute. The request may lead to mediation or other efforts toward informal resolution by DLI Customer Assistance (CA) or to an administrative conference. The conference is held by CA if the disputed amount is $1,500 or less; otherwise it is held by the Office of Administrative Hearings.

Minnesota Workers' Compensation Insurers Association (MWCIA) — Minnesota's workers' compensation data service organization (DSO). State law specifies the duties of the DSO and the

Department of Commerce designates the entity to be the DSO. Among other activities, the MWCIA collects data on claims, premium and losses from insurers, and annually produces pure premium rates.

Nonconference decision and order — A decision issued by the Customer Assistance unit of the Department of Labor and Industry, without an administrative conference, on a dispute for which it has administrative conference authority (see "administrative conference"), when it has sufficient information without conducting a conference. The decision is binding unless appealed or overturned by review at the Office of Administrative Hearings.

Notice of Intention to Discontinue (NOID) — A form by which the insurer informs the worker of its intention to discontinue temporary total disability or temporary partial disability benefits. In contrast with a petition to discontinue benefits, the NOID brings about benefit termination if the worker does not contest it.

Objection to Discontinuance — A form by which the injured worker requests a formal hearing to contest a proposed discontinuance of wage-loss benefits (temporary total, temporary partial or permanent total disability). The hearing is at the Office of Administrative Hearings.

Office of Administrative Hearings (OAH) — An executive branch body that conducts hearings on administrative law cases. One section is responsible for workers' compensation cases; it conducts administrative conferences and settlement conferences in addition to hearings.

Permanent partial disability (PPD) — A benefit that compensates for permanent functional impairment resulting from a work-related injury or illness. The benefit is based on the worker's impairment rating, which is a percentage of whole-body impairment determined on the basis of health care providers' assessments according to a rating schedule in rules. The PPD benefit is calculated under a schedule specified in law, which assigns a benefit amount per rating point with higher ratings receiving proportionately higher benefits. The scheduled amounts per rating point were fixed for injuries from 1984 through September 2000, but were raised in the 2000 law change for injuries on or after Oct. 1, 2000. The PPD benefit is paid after temporary total disability (TTD) has ended. For injuries from October 1995 through September 2000, it is paid at the same rate and intervals as TTD until the overall amount is exhausted. For injuries on or after October 2000, the PPD benefit may be paid as a lump sum, computed with a discount rate not to exceed 5 percent.

Permanent total disability (PTD) — A wage-replacement benefit paid if the worker sustains a severe work-related injury specified in law. Also paid if the worker, because of a work-related injury or illness in combination with other factors, is permanently unable to secure gainful employment, provided that, for injuries on or after Oct. 1, 1995, the worker has a PPD rating of 13 to 17 percent, depending on age and education. The benefit is equal to two thirds of the worker's gross pre-injury wage, subject to minimum and maximum weekly amounts, and is paid at the same intervals as wages were paid before the injury. For injuries on or after Oct. 1, 1995, benefits end at age 67 under a rebuttable presumption of retirement. Also for injuries on or after Oct. 1, 1995, weekly benefits are subject to a minimum of 65 percent of the SAWW. The maximum weekly benefit amount is indicated in Appendix B. Cost-of-living adjustments are described in this appendix.

Petition to discontinue benefits — A document by which the insurer requests a formal hearing to allow a discontinuance of wage-loss benefits (temporary total disability (TTD), temporary partial disability (TPD) or permanent total disability (PTD)). The hearing is conducted at the Office of Administrative Hearings for TTD or TPD benefits or at the Workers' Compensation Court of Appeals for PTD benefits.

Policy year — The year of initiation of the insurance policy covering the accident or condition that caused the injury or illness. In policy year data, all claims and costs are tied to the year in which the applicable policy took effect. Since policy periods often include portions of two calendar years, the data for a policy year include claims and costs for injuries occurring in two different calendar years.

Primary liability — The overall liability of the insurer for any costs associated with a claim

once the injury is determined to be compensable. An insurer may deny primary liability (deny that the injury is compensable) if it has reason to believe the injury was not work-related, was intentionally self-inflicted, resulted from intoxication or happened during participation in a nonrequired recreational program.

Pure premium — A measure of expected losses, equal to the sum, over all insurance classes, of payroll times the applicable pure premium rate(s) (the rate(s) for the insurance class(es) concerned), adjusted for individual employers' prior loss experience. It is different from (and somewhat lower than) the actual premium charged to employers because actual premium includes other insurance company costs plus taxes and assessments.

Pure premium rates — Rates of expected indemnity and medical losses a year per $100 of covered payroll, also referred to as "loss costs." Pure premium rates are determined annually by the Minnesota Workers' Compensation Insurers Association for approximately 560 insurance classes in the voluntary market. They are based on insurer "experience" and statutory benefit changes. "Experience" refers to actual losses relative to pure premium for the most recent report periods. The pure premium rates are published with documentation in the annual *Minnesota Ratemaking Report* subject to approval by the Department of Commerce.

Rehabilitation Request — A form by which a party to a vocational rehabilitation dispute requests assistance from the Department of Labor and Industry (DLI) in resolving the dispute. The request may lead to mediation or other efforts toward informal resolution by DLI Customer Assistance, or to an administrative conference.

Request for Administrative Conference — A form by which the injured worker requests an administrative conference to contest a proposed discontinuance of wage-loss benefits (temporary total, temporary partial or permanent total disability).

Second-injury claim — A claim for which the insurer (or self-insured employer) is entitled to reimbursement from the Special Compensation Fund because the injury was a subsequent (or "second") injury for the worker concerned. The 1992 law eliminated reimbursement (to insurers) of second-injury claims for subsequent injuries occurring on or after July 1, 1992.

Self-insurance — A mode of workers' compensation insurance in which an employer or employer group insures itself or its members. To do so, the employer or employer group must meet financial requirements and be approved by the Department of Commerce.

Settlement conference — A proceeding at the Office of Administrative Hearings to resolve issues presented on a claim petition when it appears possible to settle the issues without a formal hearing. If a settlement is reached, it typically includes an agreement by the claimant to release the employer and insurer from future liability for the claim other than for medical treatment.

Special Compensation Fund (SCF) — A fund within the Department of Labor and Industry (DLI) that, among other things, pays uninsured claims and reimburses insurers (including self-insured employers) for supplementary and second-injury benefit payments. (The supplementary benefit and second-injury provisions only apply to older claims because they were eliminated by the law changes of 1995 and 1992, respectively.) Revenues come primarily from an assessment on insurers and self-insured employers. The SCF also funds the operations of DLI, the workers' compensation portion of the Office of Administrative Hearings, the Workers' Compensation Court of Appeals and workers' compensation functions in the Department of Commerce.

Statewide average weekly wage (SAWW) — The average wage used by insurers and the Department of Labor and Industry (DLI) to adjust certain workers' compensation benefits. This report uses the SAWW to adjust average benefit amounts for different years so they are all expressed in constant (2003) wage dollars. The SAWW, from the Department of Employment and Economic Development, is the average weekly wage of nonfederal workers covered under unemployment insurance.

Stipulated benefits — Indemnity and/or medical benefits specified in a "stipulation for settlement," which states the terms of settlement of a claim among the affected parties. A

stipulation usually occurs in the context of a dispute, but not always. The stipulation may be incorporated into a mediation agreement, or may be reached in a settlement conference or associated preparatory activities, in which case it must be approved by a workers' compensation judge. Stipulated benefits are usually paid in a lump sum.

Supplementary benefits — Additional benefits paid to certain workers receiving temporary total disability (TTD) or permanent total disability (PTD) benefits for injuries prior to October 1995. These benefits are equal to the difference between 65 percent of the statewide average weekly wage and the TTD or PTD benefit. The Special Compensation Fund reimburses insurers (and self-insured employers) for supplementary benefit payments. Supplementary benefits were repealed for injuries on or after Oct. 1, 1995.

Temporary partial disability (TPD) — A wage-replacement benefit paid if the worker is employed with earnings that are reduced because of a work-related injury or illness. (The benefit is not payable for the first three calendar days of total or partial disability unless the disability lasts, continuously or intermittently, for at least 10 days.) The benefit is equal to two thirds of the difference between the worker's gross pre-injury wage and his or her gross current wage, subject to a maximum weekly amount, and is paid at the same intervals as wages were paid before the injury. For injuries on or after Oct. 1, 1992, TPD benefits are limited to a total of 225 weeks and to the first 450 weeks after the injury (with an exception for approved retraining). The maximum weekly benefit amount is indicated in Appendix B. An additional limit is that the weekly TPD benefit plus the employee's weekly wage earned while receiving TPD benefits may not exceed 500 percent of the SAWW. Cost-of-living adjustments are described in this appendix.

Temporary total disability (TTD) — A wage-replacement benefit paid if the worker is unable to work because of a work-related injury or illness. (The benefit is not payable for the first three calendar days of total or partial disability unless the disability lasts, continuously or intermittently, for at least 10 days.) The benefit is equal to two thirds of the worker's gross pre-injury wage, subject to minimum and maximum weekly amounts, and is paid at the same intervals as wages were paid before the injury. Currently, TTD stops if the employee returns to work; the employee withdraws from the labor market; the employee fails to diligently search for work within his or her physical restrictions; the employee is released to work without physical restrictions from the injury; the employee refuses an appropriate offer of employment; 90 days have passed after the employee has reached maximum medical improvement or completed an approved retraining plan; the employee fails to cooperate with an approved vocational rehabilitation plan or with certain procedures in the development of such a plan; or 104 weeks of TTD have been paid (with an exception for approved retraining). Minimum and maximum weekly benefit provisions are described in Appendix B. Cost-of-living adjustments are described in this appendix.

Vocational rehabilitation (VR) dispute — A dispute over a vocational rehabilitation issue, such as whether the employee should be evaluated for VR eligibility, whether he or she is in fact eligible, whether certain VR plan provisions are appropriate or whether the employee is cooperating with the plan.

Vocational rehabilitation plan — A plan for vocational rehabilitation services developed by a qualified rehabilitation consultant (QRC) in consultation with the employee and the employer and/or insurer. The plan is developed after the QRC determines the injured worker to be eligible for rehabilitation services, and is filed with the Department of Labor and Industry and provided to the affected parties. The plan indicates the vocational goal, the services necessary to achieve the goal and their expected duration and cost.

Voluntary market — The workers' compensation insurance market associated with policies issued voluntarily by insurers. Insurers may choose whether to insure a particular employer. See "Assigned Risk Plan."

Workers' Compensation Court of Appeals (WCCA) — An executive branch body that hears appeals of workers' compensation decisions from the Office of Administrative Hearings. The next and final level of appeal is the Minnesota Supreme Court.

Workers' Compensation Reinsurance Association (WCRA) — A nonprofit entity created by law to provide reinsurance to workers' compensation insurers (including self-insureds) in Minnesota. Every workers' compensation insurer must purchase "excess of loss" reinsurance (reinsurance for losses above a specified limit per event) from the WCRA. Insurers may obtain other forms of reinsurance (such as aggregate coverage for total losses above a specified amount) through other means.

Written premium — The entire "bottom-line" premium for insurance policies initiated in a given year, regardless of when the premium comes due and is paid. Written premium is "bottom-line" in that it reflects all premium modifications in the pricing of the policies.

Appendix B

2000 workers' compensation law change

This appendix summarizes those components of the 2000 workers' compensation law change relevant to trends presented in this report.

The following provisions took effect for injuries on or after Oct. 1, 2000:

Temporary total disability (TTD) minimum benefit — The minimum weekly TTD benefit was raised from $104 to $130, not to exceed the employee's pre-injury wage.

Temporary total disability (TTD), temporary partial disability (TPD) and permanent total disability (PTD) maximum benefit — The maximum weekly TTD, TPD, and PTD benefit was raised from $615 to $750.

Permanent partial disability (PPD) benefits — Benefit amounts were raised for all impairment ratings. In addition, the PPD award may be paid as a lump sum, computed with a discount rate not to exceed five percent. Previously, PPD benefits were only payable in installments at the same interval and amount as the employee's temporary total disability (TTD) benefits.

Death cases — A $60,000 minimum total benefit was established for dependency benefits. In death cases with no dependents, a $60,000 payment to the estate of the deceased was established and the $25,000 payment to the Special Compensation Fund was eliminated. The burial allowance was increased from $7,500 to $15,000.

Appendix C

Data sources and estimation procedures

This appendix describes data sources and estimation procedures for those figures where additional detail is needed. Two general procedures are used throughout the report: "development" of statistics to incorporate the effects of claim maturation beyond the most current data; and adjustment of benefit and cost data for wage growth to achieve comparability over time. After a general description of these procedures, additional detail for individual figures is provided as necessary. See Appendix A for definitions of terms.

Developed statistics — Many statistics in this report are by accident year or policy year (insurance data) or by injury year (Department of Labor and Industry (DLI) data) (see Appendix A for definitions). For any given accident year, policy year or injury year, these statistics grow or "develop" over time because of claim maturation and reporting lags. This affects a range of statistics including claims, costs, dispute rates, attorney fees and others. Statistics from the DLI database develop constantly as the data is updated from insurer reports received daily. With the insurance data, insurers submit annual reports to the Minnesota Workers' Compensation Insurers Association (MWCIA) giving updates on prior accident and policy years along with initial data on the most recent year. If the DLI and insurance statistics were reported without adjustment, time series data would give invalid comparisons, because the statistics would be progressively less mature from one year to the next.

The MWCIA uses a standard insurance industry technique to produce "developed statistics." In this technique, the reported numbers are adjusted to reflect expected development between the current report and future reports. The adjustment uses "development factors" derived from historical rates of growth (from one report to the next) in the statistic in question. The result is a series of statistics developed to a constant maturity, e.g., to a "fifth-report" or "eighth-report" basis. The developed insurance statistics in this report are computed by the DLI Research and Statistics unit using tabulated numbers and associated development factors from the MWCIA.

Research and Statistics has adapted this technique to DLI data. It tabulates statistics at regular intervals from the DLI database, computes development factors representing historical development for given injury years and then derives developed statistics by applying the development factors to the most recent tabulated statistics. In this manner, the annual numbers in any given time series are developed to a constant maturity, e.g., a 20-year maturity for the claim and cost statistics in Chapters 2 and 4, since the DLI database extends back to injury year 1983 for claim and cost data. An example: In Figure 2.1, the developed number of indemnity claims for injury year 2003 (in the numerator of the indemnity claim rate) is 27,200 (rounded to the nearest hundred). This is equal to the tabulated number as of Oct. 1, 2004, 24,614, times the appropriate development factor, 1.1054.

All developed statistics are estimates and are, therefore, revised each year in light of the most current data.

Adjustment of cost data for wage growth — For reasons explained in Chapter 1, all costs in this report (except those expressed relative to payroll) are adjusted for average wage growth. The cost number for each year is multiplied by the ratio of the 2003 statewide average weekly wage (SAWW) to the SAWW for that year, using the SAWW reflecting wages paid during the respective year. Thus, the numbers for all

years represent costs expressed in 2003 wage-dollars.

Figure 2.1 — The developed number of paid indemnity claims for each year is calculated from the DLI database. The annual number of medical-only claims is estimated by applying the ratio of medical-only to indemnity claims for insured employers to the total number of indemnity claims. (The ratio is unavailable for self-insured employers.) The MWCIA, through special tabulations, provides this ratio by injury year for compatibility with the injury-year indemnity claims numbers.

The number of full-time-equivalent (FTE) workers covered by workers' compensation is estimated as total nonfederal unemployment insurance (UI) covered employment from the Department of Employment and Economic Development (DEED) times average annual hours per employee (from the annual Survey of Occupational Injuries and Illnesses, conducted jointly by the U.S. Bureau of Labor Statistics and state labor departments) divided by 2,000 (annual hours per full-time worker). Nonfederal UI-covered employment is used because there is no data on workers' compensation-covered employment.

Figure 2.2 — For insured employers, total cost is computed as written premium adjusted for deductible credits, minus paid policy dividends. Written premium and paid dividends for the voluntary market are obtained from the Department of Commerce. Written premium for the Assigned Risk Plan (ARP) is obtained from the Park Glen National Insurance Company, the plan administrator. (There are no policy dividends in the ARP.)

Written premium is adjusted upward by the amount of premium credits granted with respect to policy deductibles, to reflect that portion of cost for insured employers that falls below deductible limits. Premium credit data through policy year (PY) 2002 is available from the MWCIA. The 2003 figure is estimated by applying the ratio of premium credits to written premium for 2002 to the 2003 premium figure. When the actual amount becomes available for 2003, that year's total cost figure will be revised.

For self-insured employers, the primary component of estimated total cost is pure premium from the Minnesota Workers' Compensation Reinsurance Association (WCRA). A second component is administrative cost, estimated as 10 percent of pure premium. The final component is the total assessment paid to the Special Compensation Fund (SCF), net of the portion used to pay claims from defaulted self-insureds, since this is already reflected in pure premium.

Total workers' compensation covered payroll is computed as the sum of insured payroll, from the MWCIA, and self-insured payroll, from the WCRA. Insured payroll was not yet available for 2003. This figure was extrapolated from actual figures using the trend in nonfederal UI-covered payroll, from DEED, and the trend in the relative insured and self-insured shares of total pure premium, from the WCRA.

Figure 2.3 — Market-share percentages are taken from undeveloped counts of paid indemnity claims from the DLI database. Using undeveloped rather than developed claim counts has little effect on the percentages, because the number of indemnity claims develops at nearly the same rate for the different insurance arrangements.

Figure 2.4 — Claim and loss data is from the MWCIA's *2005 Minnesota Ratemaking Report.* This data comes from insurance company reports on claim and loss experience for individual policies for the voluntary market and the ARP. The reported losses include paid losses plus case-specific reserves. Data is developed to a fifth-report basis using the development factors in the *Ratemaking Report,* which produces statistics at an average maturity of 5.5 years from the injury date; the statistics are then adjusted for average wage growth.

Figures 2.6 and 2.7 — Following the procedure in the MWCIA's *Ratemaking Report,* Figures 2.6 and 2.7 are based on "paid plus case reserve" losses. The data is from financial reports to the MWCIA by voluntary market insurers only.

"Paid plus case reserve" losses are developed to a uniform maturity of eight years (an "eighth-report basis") using the selected development factors in the 2005 *Ratemaking Report.* In contrast with prior reports, the figures are not converted to an incurred basis. That is, the current figures only reflect paid losses plus case

reserves at eighth report; they do not also reflect other ("IBNR" and "bulk") reserves as they did before. This way, the figures more closely represent current loss trends. Payroll data for Figure 2.6 is from insurer reports on policy experience.

Figure 3.1 — Statistics are derived in the same manner as for Figure 2.4, with one modification. Figure 3.1 presents data by claim type. For permanent total disability (PTD) and death cases, the number of claims and their average cost fluctuate widely from one policy year to the next because of small numbers of cases. Therefore, to produce more meaningful comparisons among claim types, PTD and death claims and losses were estimated by applying respective percentages of claims and losses (relative to the total) over the most recent three years to total claims and losses for 2001.

Figures 3.2 and 6.6 — A modified procedure was used to estimate the percentage of paid indemnity claims with stipulated benefits (Figure 3.2) and with claimant attorney fees (Figure 6.6) for 2003. This was in contrast with the procedure used elsewhere in this report, namely computing a developed statistic from the associated undeveloped numbers. The reason is as follows:

Historical rates of development are used to project relatively immature data for recent injury years to a greater level of maturity than they have yet attained. The accuracy of the projection depends on the extent to which the immature data for these years will actually develop at the same rate as projected using historical development rates for earlier injury years. In other words, the accuracy of developed statistics depends on the stability of development rates over time.

This may be an issue with data on stipulated benefits and claimant attorney involvement. Insurers usually report this data to DLI at a point in the claim history when attorney fees and stipulated benefit payments have become established. This occurs most commonly after a settlement or hearing has occurred at the Office of Administrative Hearings (OAH).

From injury year 1997 through 2002, the percentages of claims with attorney fees and with stipulated benefits followed the dispute rate closely. In injury year 2003, the dispute rate continued increasing, but the developed percentages of paid indemnity claims with claimant attorney fees and with stipulated benefits dropped sharply. Given the close association of the three trends through 2002, it was judged appropriate to project the 2003 percentages of paid indemnity claims with stipulated benefits (Figure 3.2) and with claimant attorney fees (Figure 6.6) from the 2002 percentage using the trend in the dispute rate, and this was indeed done. Associated adjustments were made in stipulated benefits, total indemnity benefits and claimant attorney fees per claim (Figures 2.5, 3.5, 3.6 and 6.6).

Figures 4.1 to 4.4 and Appendices D and E — The statistics in these figures were calculated from detailed claim data supplied by a large insurer. To remove the effects of changing claim composition with respect to gender, age and injury type, the statistics in Figures 4.2 and 4.3 were computed as fixed-weight averages over gender, age and injury groups (a modified procedure was used for Figure 4.4, as described below).[40] In this technique, the first step is to compute each statistic (e.g., the percentage of claims with evaluation and management services) for each year for each of several groups defined by gender, age and injury type.[41] Then the statistic for each year is computed as the average of that statistic over the gender, age and injury groups, using fixed weights for these different groups. This means the weight given to each group is the same for each year, so that changes in the relative sizes of the groups have no effect on the statistics. In these computations, the fixed weights were equal to the percentages of claims in the respective groups for the whole analysis period.

In Figure 4.4, a variation on this procedure was used. The indices of units of service per claim,

[40] Changing claim composition is an issue not only because it occurs in the general population of claims. It is particularly an issue in this instance because of changes in the employer clientele of the insurer supplying the data.

[41] The age groups were 14-29, 30-39, 40-49, and 50+. The injury groups were musculoskeletal injuries of the back, musculoskeletal injuries of limbs, other musculoskeletal injuries, rheumatic and orthopedic injuries, internal and late-effect injuries, burns, contusion and crushing injuruies, disease, fractures, lacerations and amputations, multiple injuries and complex injuries (the last two categories involve different combinations of the other categories). There were 96 weighting groups (2 gender x 4 age x 12 injury type).

unit cost and service-mix expensiveness are computed by first computing numbers within detailed service categories and then aggregating across these categories. When a fixed-weight procedure is used in this process, the computations are done separately within the weighting groups. This causes some instability in the results because of small numbers of cases within the weighting groups within individual service categories. Therefore, the indices were computed without the fixed-weight procedure but were then adjusted ("benchmarked") so that the resulting annual changes in cost per claim with service (product of the three indices) were equal to the amounts computed for Figure 4.3 with the fixed-weight procedure.

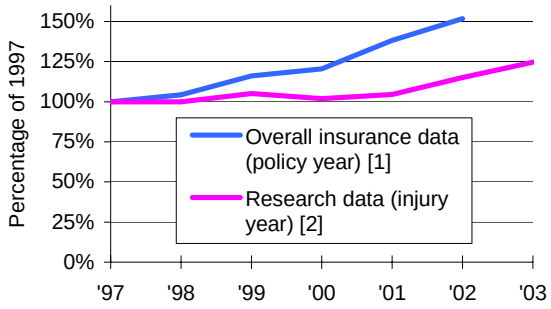
The statistics in these figures and appendices were computed by injury year at an average maturity of five years after the date of injury. Specifically, for the claims that arise in each year, medical services and costs were counted through July 10 of the fifth year following the year of injury. For injury years 2000 to 2003, data of this maturity was not yet available.[42] Therefore, the figures for those years were projected to the same level of maturity as for previous years, using development factors computed from earlier injury years.

How well does the research data represent the overall population of insured claims? A partial answer is given by Figure A-1. Average medical cost per claim shows different amounts of increase after 1997 in the two data sources. In the overall insurance data, average medical cost per claim increased 52 percent from 1997 to 2002. In the research data, the increase was only 15 percent during the same period and 25 percent from 1997 to 2003.

Because of the difference in the amounts of increase after 1997 shown in Figure A-1, the estimated magnitudes of different components of the overall medical cost increase in the research data are likely to understate, on the whole, the corresponding magnitudes for all insurers combined. However, the implications are different for different figures in Chapter 4.

Figures 4.1 and 4.2 show percent contributions to total cost (Figure 4.1) and to the total cost change per claim (Figure 4.2). Therefore, these

Figure A-1 Average medical cost per claim, overall insurance data and research data, injury years 1997-2003



Policy or injury year	Overall insurance data (policy year) [1]		Research data (injury year) [2]	
	Amount per claim	Pctg. of 1997	Amount per claim	Pctg. of 1997
1997	$2,270	100.0%	$1,640	100.0%
1998	2,370	104.4	1,640	99.9
1999	2,640	116.2	1,720	105.0
2000	2,740	120.5	1,670	101.9
2001	3,140	138.3	1,710	104.5
2002	3,450	151.9	1,890	115.2
2003	[3]	[3]	2,040	124.7

1. From Figure 2.4.
2. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Costs are adjusted for average wage growth between the respective year and 2003. (See text.)
3. Not yet available.

figures would not *necessarily* be different if the overall cost increase in the research data were the same as for all insurers (although this seems a likely possibility). Figures 4.3 and 4.4, by contrast, indicate changes in different components of the overall increase in average medical cost per claim (24.7 percent, shown in Figure 4.3). If this overall increase were as great as in the insurance data, the increase in the different components would have to be larger on the whole, although this would probably be true in varying degrees for cost components.

Figure 4.4 and Appendix E — For selected service groups, the change in the average cost of the service group per claim with services in the group was decomposed into (1) the change in average number of units of service per claim, (2) the change in average cost per unit of service (with a fixed service mix) and (3) the change in expensiveness of the service mix. This was only done for selected service groups because it requires well-defined codes for all types of service within the group, which was not the situation for all service groups. The first of the

[42] DLI received the data in September 2004.

three components is self-explanatory. The last two were calculated as follows:

Change in average cost per unit of service (fixed service mix) — For each pair of adjacent years, the average cost per unit of service was computed for each year using *the average payment per unit for each type of service for the year in question* along with *the average service mix for the two years combined*.[43] The index of change for the two-year interval was then computed as the percent change between the two years in average cost per unit so computed. This index, thus, reflects only changes in the costs of particular services, not changes in service mix.

Change in expensiveness of service mix — For each pair of adjacent years, the average cost per unit of service was computed for each year using *the service mix for the year in question* along with *the average payment per unit for each type service for the two years combined*.[44] The index of change for the two-year interval was then computed as the percent change between the two years in average cost per unit so computed. This index, thus, reflects only changes in service mix, not changes in the costs of particular services.

***Figure 6.6* —** See discussion relating to Figure 3.2.

***Figure 6.7* —** Insurers submit an annual report to DLI indicating total defense legal costs paid during the year (divided into attorney fees and other legal costs). For the percentage in the figure, these costs are compared to total indemnity and medical benefits paid during the year, compiled by DLI primarily from insurer reports to the SCF.

[43] This is a simplified version of the computation. More detail is available upon request.

[44] This is a simplified version of the computation. More detail is available upon request.

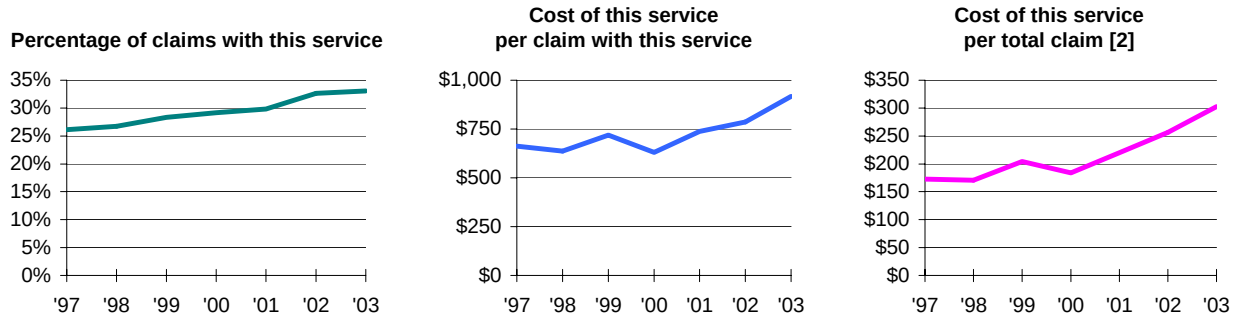
Appendix D

Medical cost trends, part 1: costs of service groups per total claim

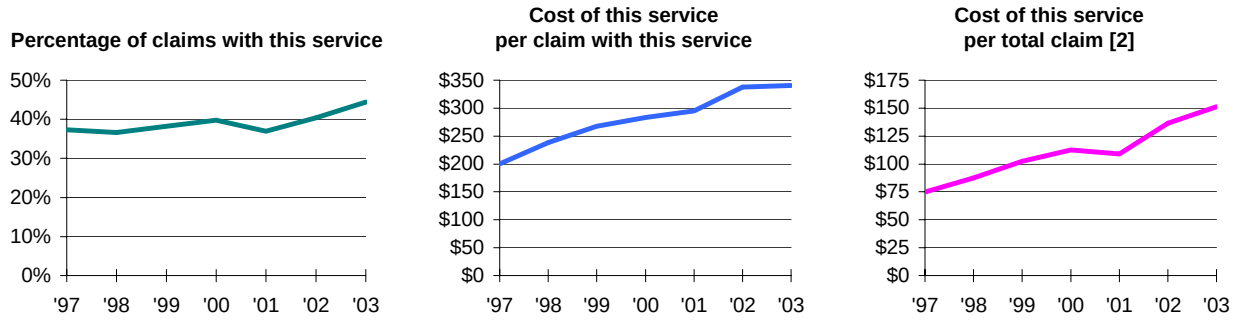
This appendix presents the medical-cost trend data behind Figure 4.3. For each service group, trends are presented for the percentage of claims with the service, the average cost of the service for claims with the service and the average cost of the service per total claim. The last of these items is the product of the first two.

Costs of medical service groups per total claim, injury years 1997-2003 [1]

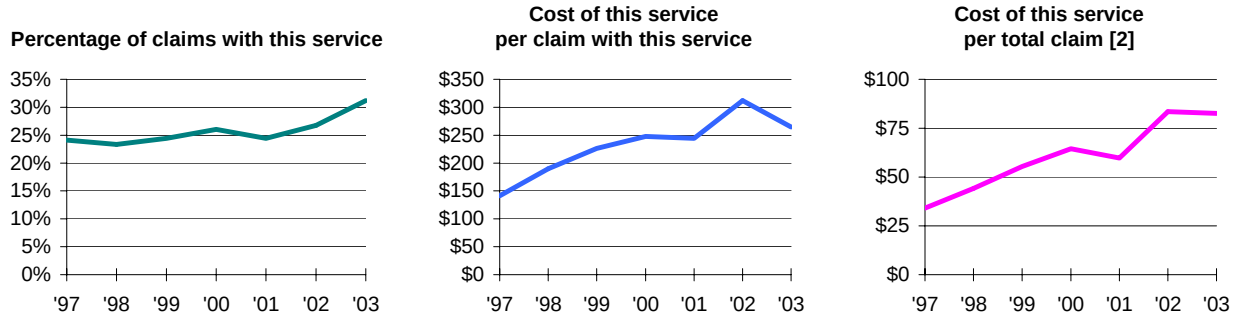
Outpatient hospital facility services



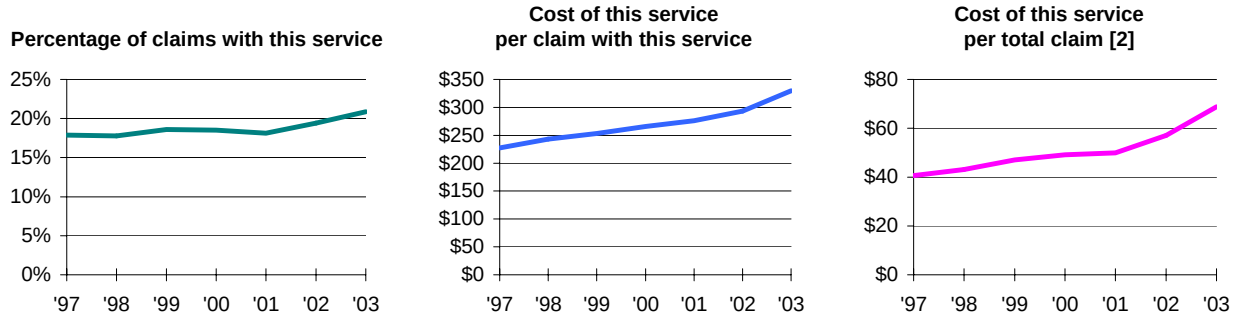
Drugs (total)



Drugs (nonhospital providers)

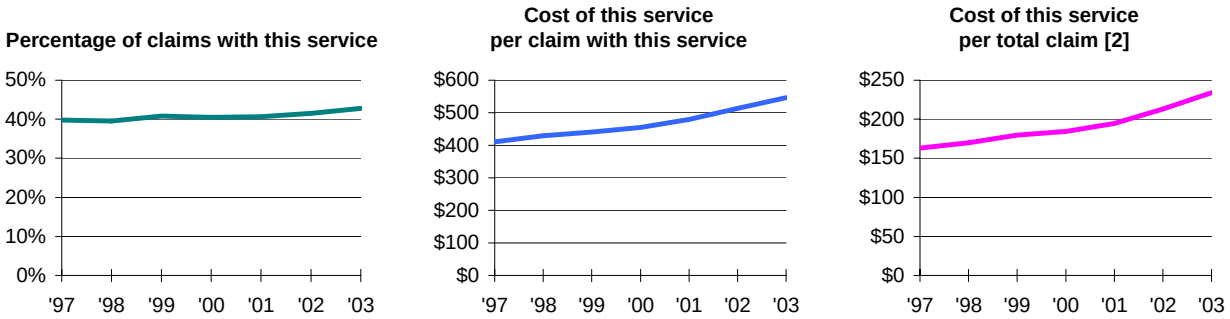


Drugs (hospital providers)

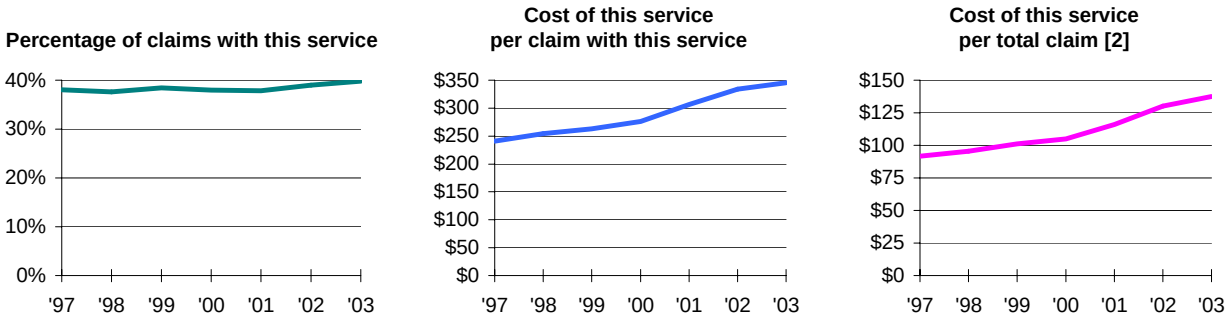


(Notes at end of figure.)

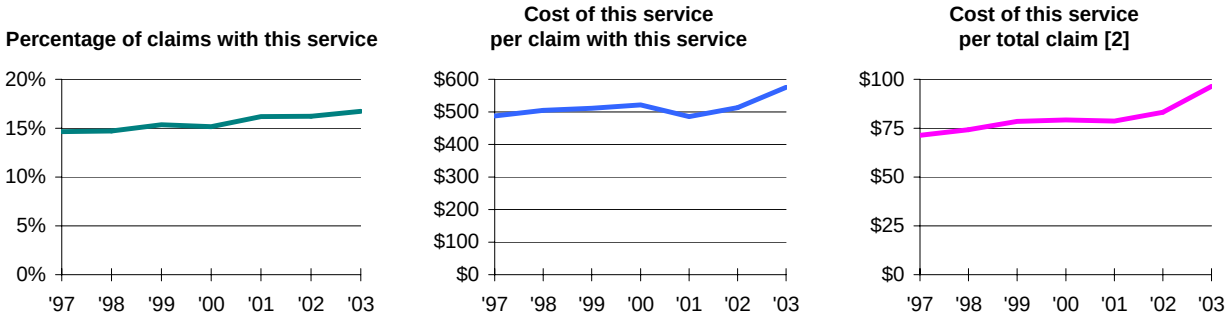
Radiology (total)



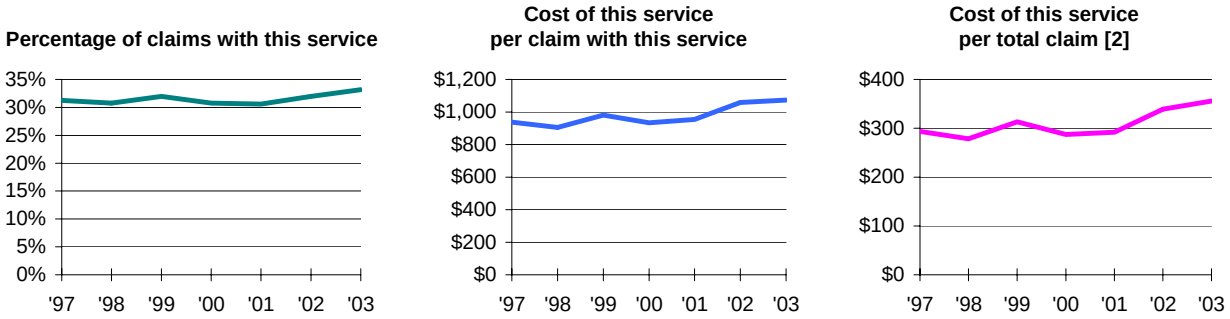
Radiology (nonhospital providers)



Radiology (hospital providers)

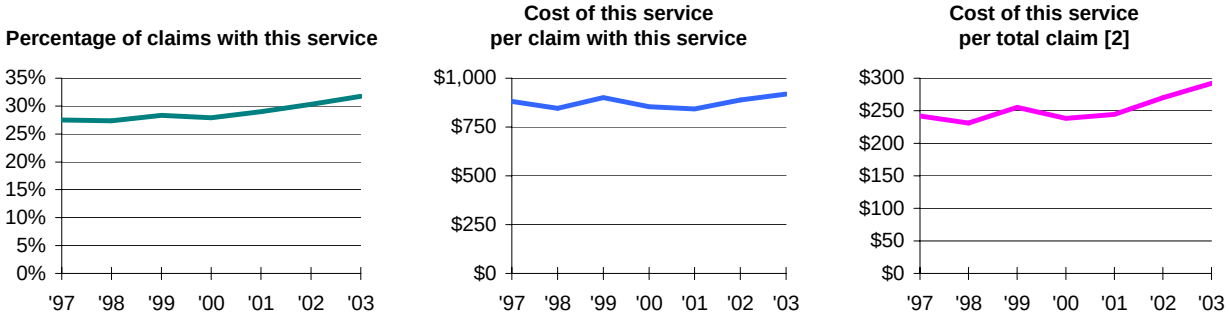


Surgery and anesthesia (total)

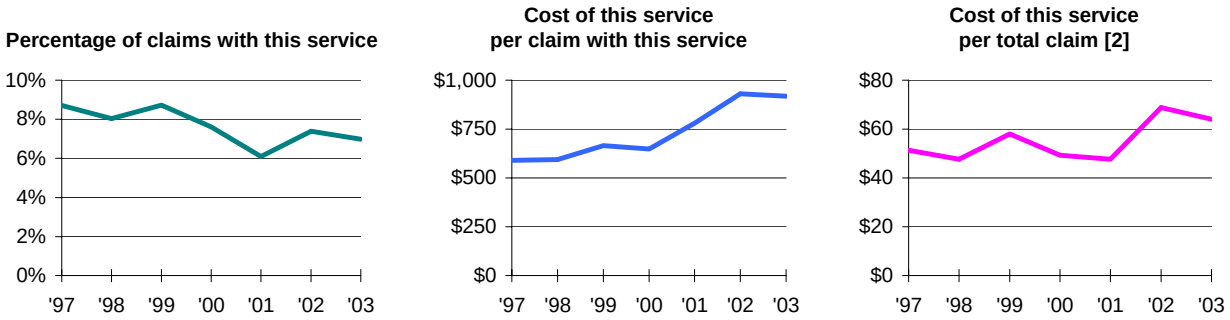


(Notes at end of figure.)

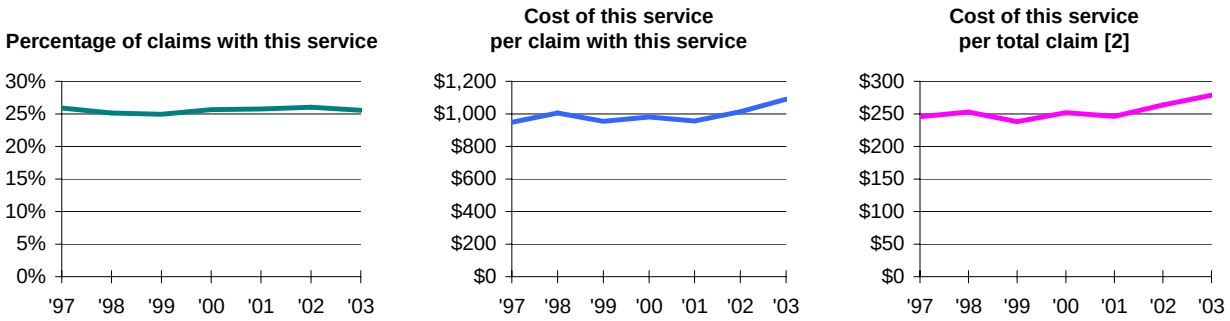
Surgery and anesthesia (nonhospital providers)



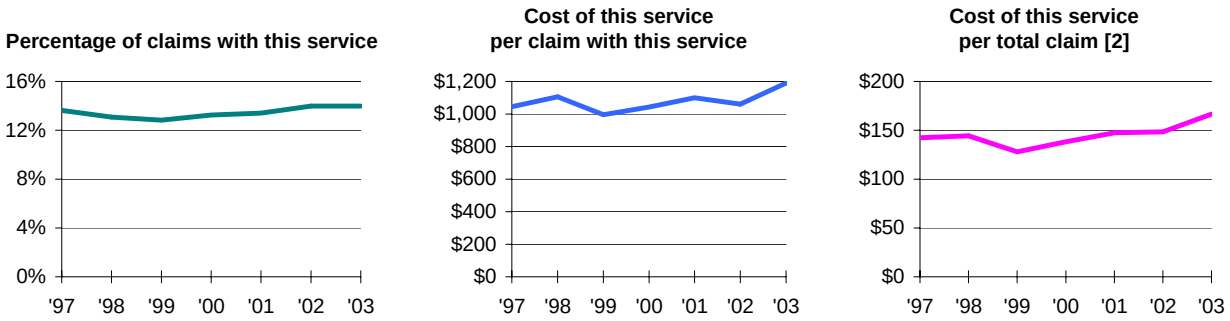
Surgery and anesthesia (hospital providers)



Physical medicine (total)



Physical medicine (physical therapist providers)



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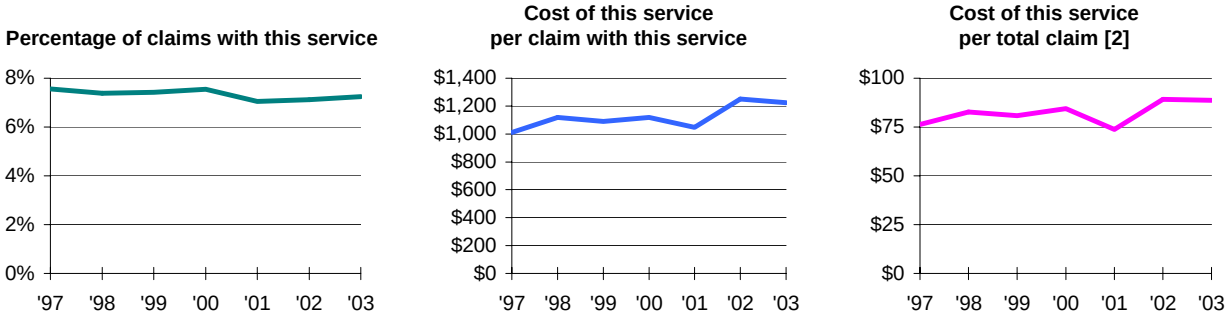
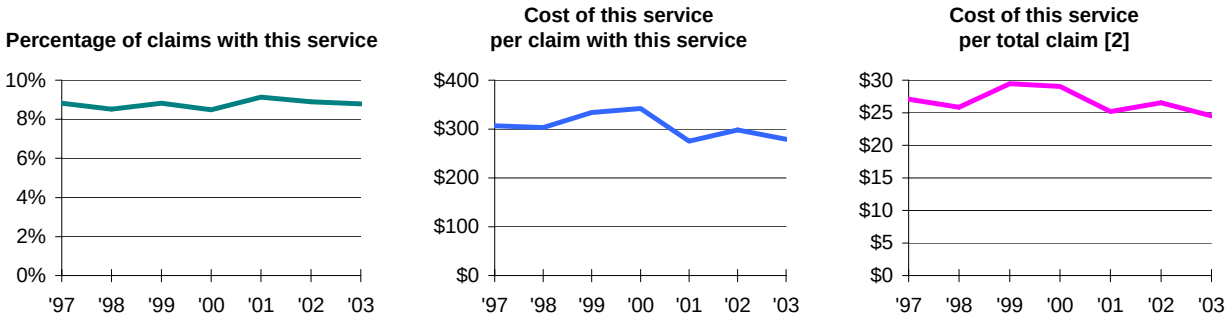
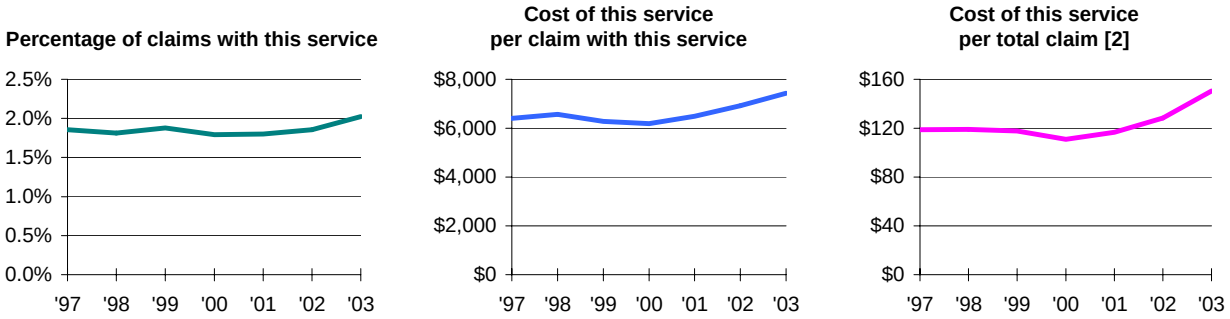
Physical medicine (hospital providers)



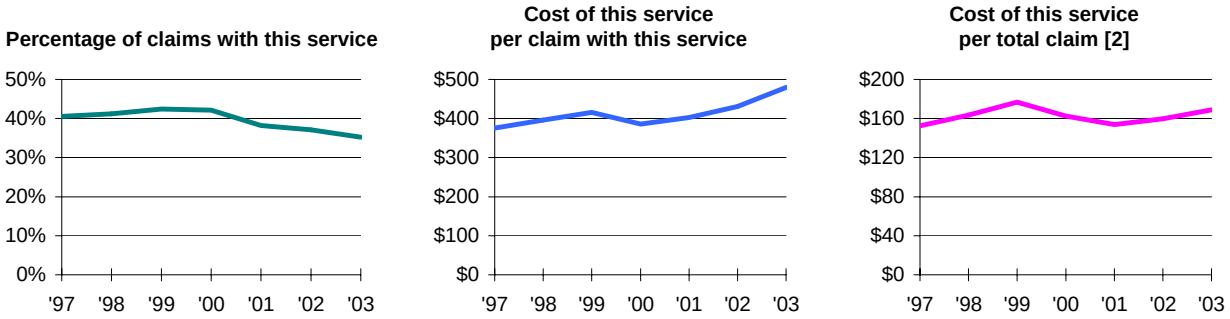
Physical medicine (chiropractic providers)



Inpatient hospital facility services



Equipment and supplies (total)



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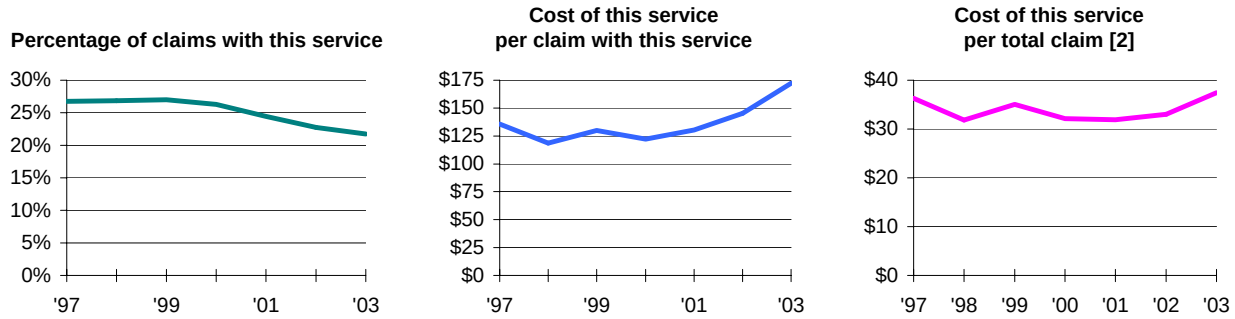
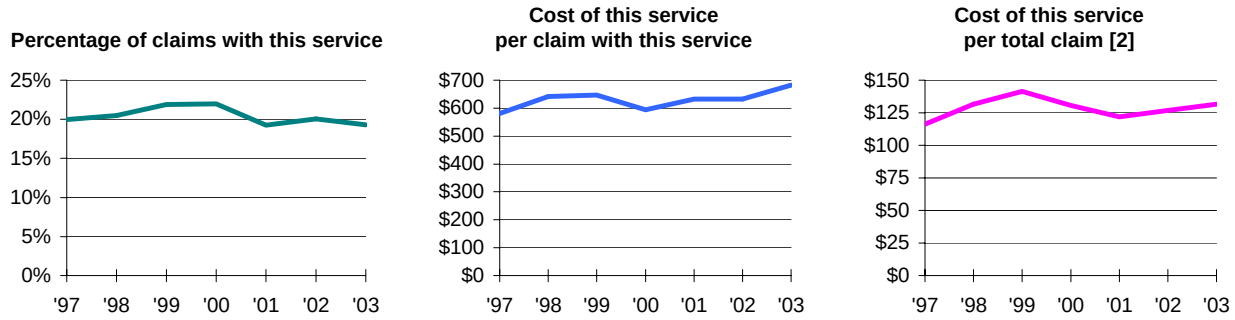
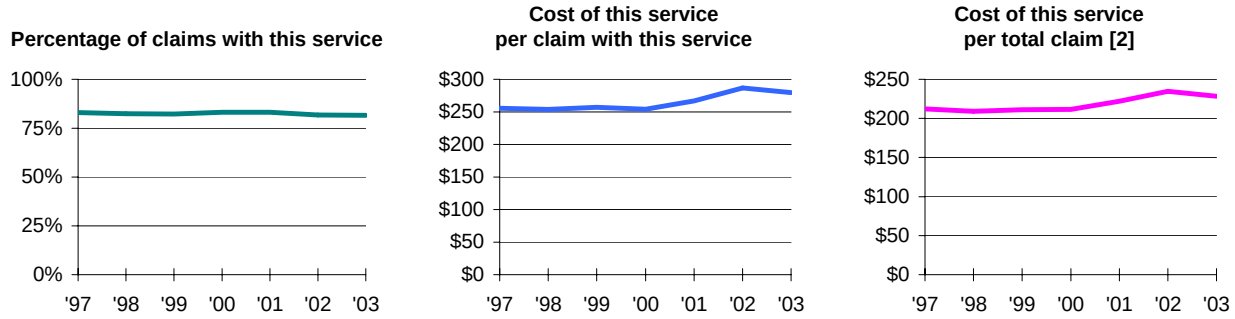
Equipment and supplies (nonhospital providers)



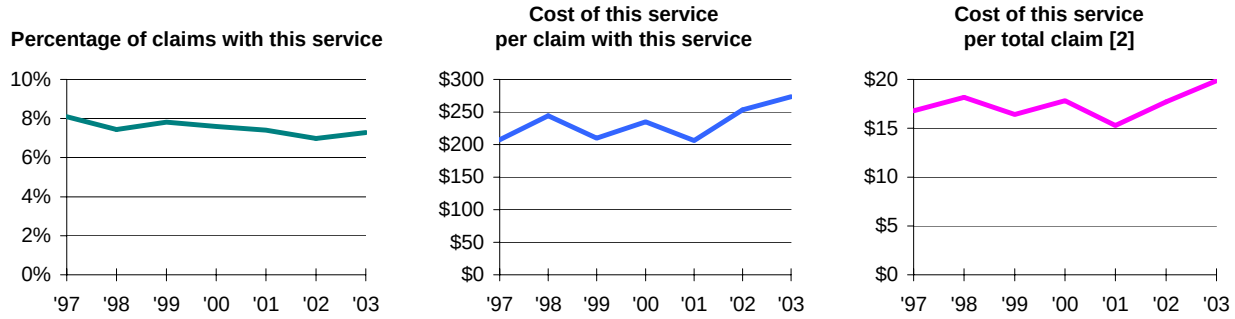
Equipment and supplies (hospital providers)



Evaluation and management



Pathology and laboratory services



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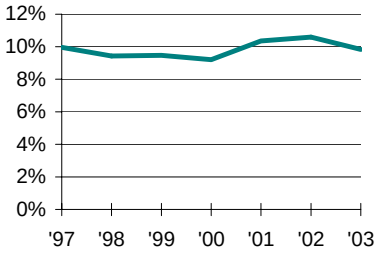
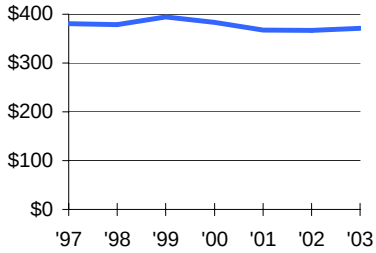
Chiropractic manipulations

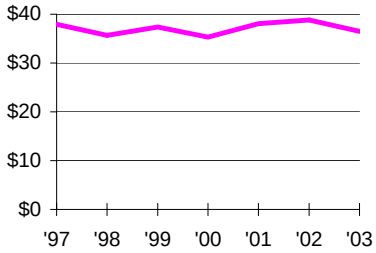
Percentage of claims with this service



Cost of this service per claim with this service

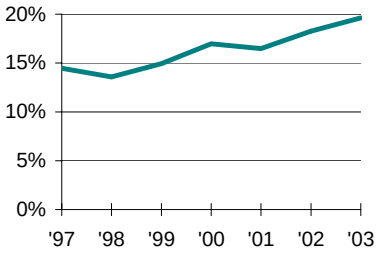


Cost of this service per total claim [2]

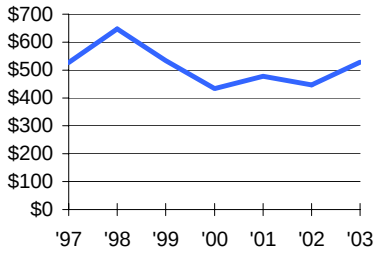


Other services

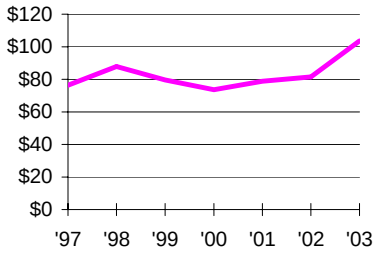
Percentage of claims with this service



Cost of this service per claim with this service



Cost of this service per total claim [2]



1. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Costs are adjusted for average wage growth between the respective year and 2003. (See Appendix C.) Service categories are shown in the same order as in Figures 4.2 and 4.3.
2. Equal to the product of the first two trends for each service group.

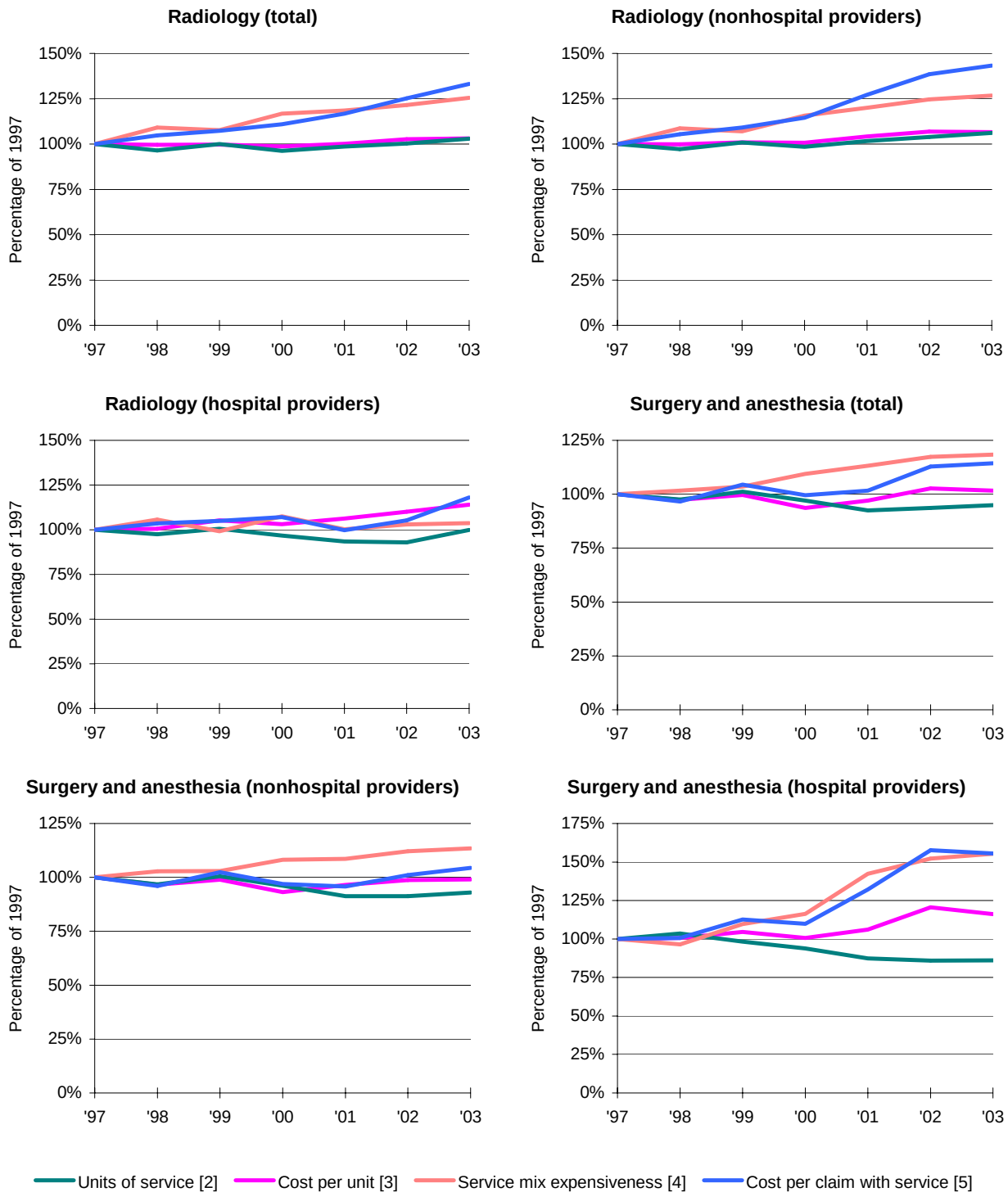
Appendix E

Medical cost trends, part 2: quantity, unit cost and service mix indices

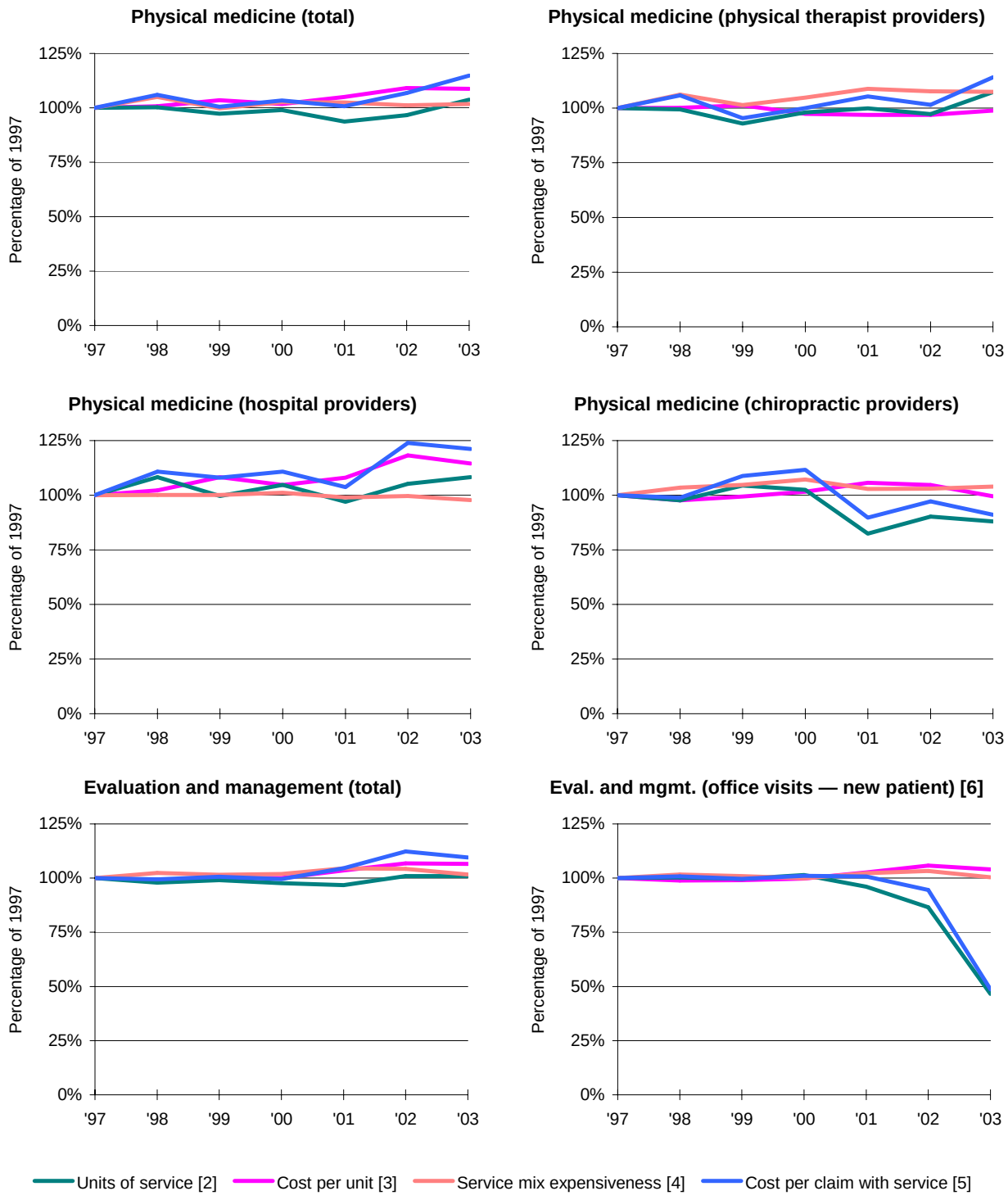
This appendix presents the medical-cost trend data behind Figure 4.4. For selected service groups, trends are presented for the number of units of service per claim with the service, the average cost per unit of service, the expensiveness of the service mix, and the average cost of the service per claim with the service. The trends are presented in index form, meaning that the value for each year is expressed as a percentage of the base year, 1997. The last of the four items is the product of the first three.[45]

[45] See note 5 at the end of the figure.

Quantity, unit cost, and service mix indices, injury years 1997-2003 [1]

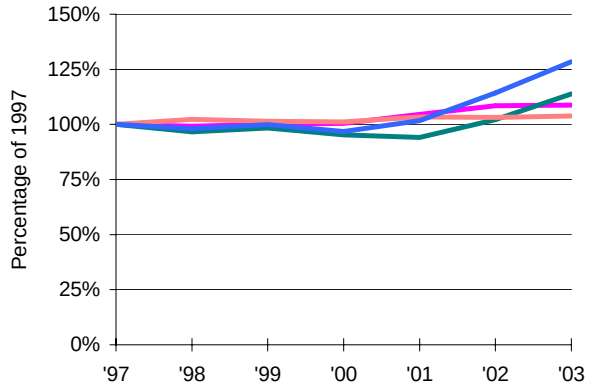


(Notes at end of figure.)

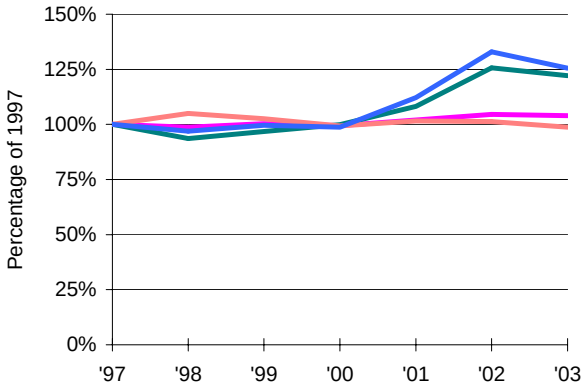


(Notes at end of figure.)

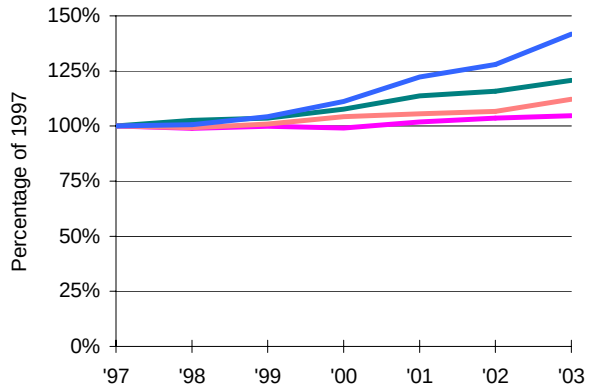
Eval. and mgmt. (office visits — estab. patient) [6]



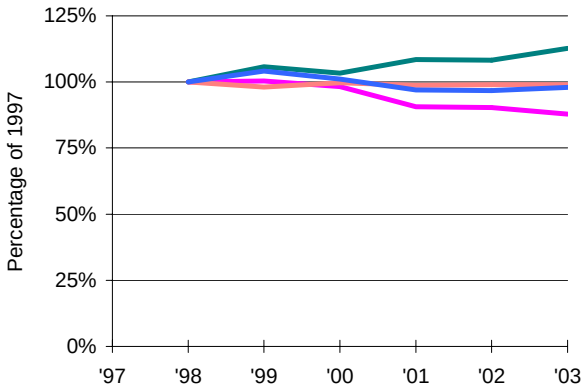
Eval. and mgmt. (office consultations) [6]

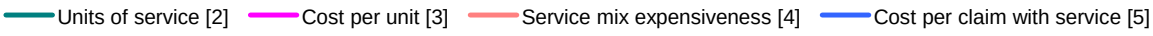


Eval. and mgmt. (emergency department servs.) [6]



Chiropractic manipulations [7]





1. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Service groups are shown in the same order as in Figure 4.4. Only some service groups are represented because the service codes (for individual types of service within the group) do not allow the computation of these indices for all service groups. (See Appendix C.)
2. Units of service per claim with service.
3. Average cost per unit of service, holding constant the service mix within the service group. Adjusted for average wage growth. (See Appendix C.)
4. Average cost per unit of service as affected by changes in the service mix within the service group, holding constant the average cost of particular types of service (see Appendix C).
5. Cost of the service per claim with service, adjusted for average wage growth (see Appendix C). Equal to the product of the indices of units of service, cost per unit and service mix expensiveness. As an approximation, the percent change in the cost of the service per claim with the service is roughly equal to the sum of the percent changes in the three component indices.
6. For the four subgroups under evaluation and management, units of service and cost per claim with service are expressed relative to the number of claims with any evaluation and management services.
7. The indices for chiropractic manipulations begin with 1998 because service-coding changes prevent comparisons with earlier years.